

Colorado Department of Public Health and Environment

OPERATING PERMIT

TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION

NUCLA STATION

Issued: June 1, 2002

AIR POLLUTION CONTROL DIVISION COLORADO OPERATING PERMIT

FACILITY NAME: Nucla Station OPERATING PERMIT NUMBER

FACILITY ID: 0850001 960PMO168

ISSUE DATE: June 1, 2002 EXPIRATION DATE: June 1, 2007

MODIFICATIONS: See Appendix F of Permit

Issued in accordance with the provisions of Colorado Air Pollution Prevention and Control Act, 25-7-101 et seq. and applicable rules and regulations.

ISSUED TO: PLANT SITE LOCATION:

Tri-State Generation & Transmission Association, Inc.

30739 DD 30 Road

1100 W. 116th Street

Nucla, CO 81424

Westminster, CO 80234 Montrose County

INFORMATION RELIED UPON

Operating Permit Application Received: February 23, 1996

And Additional Information Received: August 3, 1998; January 15, 1999; April 13, 2000

Nature of Business: Generation of Electricity

Primary SIC: 4911

RESPONSIBLE OFFICIAL FACILITY CONTACT PERSON

Name: Jerry A. Walker Name: Patricia A. Morgan

Title: Vice President Title: Chemistry/Environmental Supervisor

Environmental

Phone: (303) 452-6111 Phone: (970) 864-7316

SUBMITTAL DEADLINES:

Semi-Annual Monitoring Period: July – December, January – June (the first monitoring period will cover the period from June 1, 2002 through December 31, 2002)

Semi-Annual Monitoring Report: February 1, 2003 & August 1, 2003 and subsequent years (the first report will cover the period from June 1, 2002 through December 31, 2002)

Annual Compliance Period: Begins July 1 to June 30 (the first compliance period will cover the period from June 1, 2002 through June 30, 2003)

Annual Compliance Certification: August 1, 2003 and subsequent years (the first report will cover the period from June 1, 2002 through June 30, 2003)

FOR ACID RAIN DEADLINES SEE SECTION III.4 OF THIS PERMIT

TABLE OF CONTENTS:

SECTI	ON I - General Activities and Summary	1
1.	Permitted Activities	1
2.	Prevention of Significant Deterioration/New Source Review	
3.	Accidental Release Program (112(r))	
4.	Summary of Emission Units	
5.	Compliance Assurance Monitoring (CAM)	4
SECTI	ON II - Specific Permit Terms	6
1.	B004 - S004 - 1,112 mmBtu/Hr Pyropower Circulating Fluidized Bed (CFB) Boiler	
2.	B004 - S004 - 1,112 mmBtu/Hr Pyropower Circulating Fluidized Bed (CFB) Boiler Propane	19
3.	B005 - S005 Cleaver Brooks 25.1 mmBtu/hour Auxiliary Boiler	
4.	Coal Handling and Processing	22
5.	Limestone Preparation	
6.	Ash Handling and Processing.	
7.	Ash Hauling and Disposal	
8.	P401 - Cooling Tower Serving Turbines 1, 2, & 3	
9.	Opacity Limits	
10.	40 CFR Part 60, Subpart A, 60.11(d) Requirements	
11.	Continuous Emission Monitoring and Continuous Opacity Monitoring Systems	
12.	Insignificant Activities	
13.	Reporting	43
SECTI	ON III - Acid Rain Requirements	44
1.	Designated Representative and Alternate Designated Representative	44
2.	Sulfur Dioxide Emission Allowances and Nitrogen Oxide Emission Limitations	
3.	Standard Requirements	44
4.	Reporting Requirements	48
5.	Comments, Notes and Justifications:	49
SECTI	ON IV - Permit Shield	50
1.	Specific Conditions	
2.	General Conditions	
SECTI	ON V - General Permit Conditions	50
APPE	NDIX A - Inspection Information	1
	ctions to Plant:	
	ty Equipment Required:	
	lity Plot Plan:	
List	of Insignificant Activities:	1
APPE	NDIX B Reporting Requirements and Definitions	1
	NDIX C Format for Annual Compliance Certification Reports	
APPE	NDIX D Notification Addresses	1
APPE	NDIX E Permit Acronyms	1
	NDIX F Permit Modifications	
APPE	NDIX G Coal Sampling Plan Elements	1

TABLE OF CONTENTS:

APPENDIX H Baghouse Internal Inspection Procedures	1
--	---

TABLE OF CONTENTS:

SECTION I - General Activities and Summary

Note To Reader: Appendix E presents the acronyms and abbreviations used in preparing this permit.

1. Permitted Activities

This facility is a coal fired power plant with a gross electricity generating capacity of 110 MW. Three 1.1 coal fired stoker boilers were shut down and replaced with an atmospheric circulating fluidized bed (CFB) boiler (Unit #4), which was placed in service in June, 1987. The unit is rated at 1,112 mmBtu/hour and propane is used as a start-up fuel. Four baghouses control PM emissions. Continuous emissions monitoring is in place for SO₂, NO_x, CO₂, stack gas flow, and opacity (COM). The unit is subject to the requirements of Title IV, the Acid Rain Program (NOTE: Under Title IV, CFBs are not subject to a NO_x limit). Associated activities covered by this permit include a 25.1 mmBtu/hour propane fired auxiliary boiler, two cooling towers, and coal, limestone, and ash handling systems.

The facility is located at 30739 DD 30 Road, in Nucla. The area in which the plant operates is designated as attainment for all pollutants.

Utah is an affected state within 50 miles of the plant. There is one Federal Class I designated area within 100 kilometers of the facility, Black Canyon of the Gunnison National Wilderness Area. In addition, Colorado National Monument, those portions of Black Canyon of the Gunnison not included as National Wilderness Area, and Uncompangre and Wilson Mountain Forest Service Primitive Areas are Federal land areas within 100 kilometers of the facility. These areas have been designated by the State to have the same sulfur dioxide increment as a Federal Class I area.

- Until such time as this permit expires, is modified or is revoked, the permittee is allowed to discharge air 1.2 pollutants from this facility in accordance with the requirements, limitations, and conditions of this permit.
- 1.3 This Operating Permit incorporates the applicable requirements contained in the underlying construction permits, and does not affect those applicable requirements, except as modified during review of the application or as modified subsequent to permit issuance using the modification procedures found in Regulation No. 3, Part C. These Part C procedures meet all applicable substantive New Source Review requirements for purposes of this Operating Permit and shall survive reissuance. This Operating Permit incorporates the applicable requirements (except as noted in Section II) from the following Colorado Construction Permit(s): 84MO120(1), 96MO742, 96MO382, 87MO043F, 96MO703, 98MO0484, and the PSD permit.
- 1.4 All conditions in this permit are enforceable by the US Environmental Protection Agency, Colorado Air Pollution Control Division (hereinafter Division) and its agents, and citizens unless otherwise specified. State-only enforceable conditions are: Conditions 3.4.3 (Opacity), 1.3.3 (SO₂), and 3.3.2 (PM) of

Issued: June 1, 2002

Section II of this permit; Condition 1.10 (Lead) of Section II of this permit; Conditions 14 (Odor) and those portions of Regulation No. 15, as set forth in Condition 18 (Ozone Depleting Compounds) of Section V of this permit. All information gathered pursuant to the requirements of this permit is subject to the Recordkeeping and Reporting requirements listed under Condition 22 of the General Conditions in Section V of this permit.

2. Prevention of Significant Deterioration/New Source Review

- 2.1 The entire plant is categorized as a major stationary source for Prevention of Significant Deterioration/New Source Review (PSD/NSR) provisions. The EPA issued a PSD permit for the facility on October 11, 1984. Future modifications at this facility resulting in a significant net emissions increase (see Colorado Regulation No. 3, Part A, Section I.B.37 and 58) for any pollutant as listed in Regulation No. 3, Part A, Section I.B.58 or a modification which is major by itself may result in the application of the PSD review requirements.
- 2.2 There are no other Operating Permits associated with this facility.

3. Accidental Release Program (112(r))

- 3.1 The facility is subject to the provisions of the Accidental Release Prevention Plan of Section 112(r)(7) of the Clean Air Act.
- 3.2 The permittee shall certify in the written annual compliance certification to the Division that the facility is in compliance with all the requirements of 112(r) and that the Risk Management Plan has been submitted to the appropriate authority and/or a designated central location. Such certification shall be signed by the Responsible Official.

4. Summary of Emission Units

4.1 The emissions units regulated by this permit are the following:

Emission Unit Number	AIRS Stack Number	Facility Stack Number	Description	Pollution Control Device	Existing Permit
B004	001	S004	Pyropower #1362 Circulating Fluidized Bed, 1,112 mmBtu/hour, Coal Fired Boiler	SO ₂ - Limestone Injection NO _x - Boiler Design - Selective Non- Catalytic Reduction System PM - Baghouse	84MO120(1)

Issued: June 1, 2002

Emission Unit Number	AIRS Stack Number	Facility Stack Number	Description	Pollution Control Device	Existing Permit
B005	001	S005	Cleaver Brooks CB200-600, #1-70825, Propane Fired Boiler		Exempt
P101	01 003 F101		On-Site Coal Haulage	Watering As Needed	96MO742
P102	-	F102	Main and Surge Coal Stockpiles	Water Spray As Needed	
P103	-	F103	Coal Haulage from Coal Surge Stockpile	Watering As Needed	
P104		F104	Coal Transfer from Truck to Hopper	Water Spray As Needed	
P105		F105	Primary Crusher, Rotary Breaker, Rotary Breaker Discharge/Loadout/Stockpile, Conveyors, and Main Coal Stockpile Loadout, and Reject Pile and Stockpile	Covered Enclosure Lowering Well or Water Spray As Needed	
P106		S004	Final Crushers, High Angle Conveyor, En Masse Conveyor, Conveyor Belts, and Coal Storage Silos	Covered Enclosure Baghouse - Crushers, En Masse, Silos	
P201	005	S201	Limestone Receiving Hoppers, Crushers, Conveyors, and Transfers	Baghouse Windguard	96MO382
P202	005	S201	900 Ton Limestone Storage Silo	Baghouse	
P203	005	S203	Limestone Pulverizer System	Baghouse	
P204	005	S204	Two (2) 135 Ton Limestone Storage Silos (in generation building)	Baghouse	
P205	005	F205	Limestone Hauling, Stockpiling, and Reclaiming	Emission Control Plan	
P301a	050A	S301a1,2 and 3	Pneumatic Conveyance of Fly Ash	Baghouse	98MO0484
P301b	050B	S301b1 and 2	Pneumatic Conveyance of Bottom Ash	Baghouse	
P301c	050C	S301a4	720 Tons Capacity Fly Ash Storage Silo	Baghouse	98MO0484
P301d	050D	S301b3	200 Tons Capacity Bottom Ash Storage Silo	Baghouse	
P302a	051A	S301a4	Truck Loading of Fly Ash - Dry	Baghouse & Telescopic Chute	
P302b	051B	S301b3	Truck Loading of Bottom Ash - Dry	Baghouse & Telescopic Chute	
P302c	051C	F302c	Truck Loading of Fly Ash - Rotary Unloader	Partial Enclosure & Water Spray	

Issued: June 1, 2002 Last Revised: September 25, 2007

Emission Unit Number	AIRS Stack Number	Facility Stack Number	Description	Pollution Control Device	Existing Permit
P302d	051D	F302d	Truck Loading of Bottom Ash - Rotary Unloader	Partial Enclosure & Water Spray	
P303a		F303a	Ash Hauling @ Nucla Station & Ash Hauling @ Disposal Site	Water	87MO043F
P303b		F303b	Landfill Operations and Wind Erosion	Water & Compaction	
P401	006	S401	Cooling Tower Serving Turbines 1,2,3	Drift Eliminators	96MO703
P402	008	S402	Cooling Tower Serving Turbine 4	Drift Eliminators	

4.2 Alternate Operating Scenarios

The permittee shall be allowed to make the following changes to its method of operation without applying for a revision of this permit. See Section II of this permit for specific permit terms applicable to these alternate scenarios.

4.2.1 Spent Boiler Tube Cleaning Waste Disposal

The permittee may dispose of spent boiler tube cleaning materials in the CFB (Unit 4), in accordance with the specific permit terms set forth in Section II of this permit.

4.2.2 Non-Hazardous Petroleum Contaminated Soil Disposal

The permittee may dispose of non-hazardous petroleum contaminated soil in the CFB (Unit 4), in accordance with the specific permit terms set forth in Section II of this permit.

4.2.3 Non-Hazardous Sandblasting Grit Material

The permittee may utilize non-hazardous sandblasting grit by mixing it with bottom ash and employing it as suspensions material in the combustor of the CFB during start-up. The sandblasting grit will ultimately be disposed of by hauling it with bottom ash and flyash to the landfill.

5. Compliance Assurance Monitoring (CAM)

The following emission points at this facility use a control device to achieve compliance with an emission limitation or standard to which they are subject and have pre-control emissions that exceed or are equivalent to the major source threshold. They are therefore subject to the provisions of the CAM

Tri-State Generation & Transmission
Nucla Station
Page 5

program as set forth in 40 CFR Part 64 as adopted by reference into Colorado Regulation No. 3, Part C, Section XIV: None.

SECTION II - Specific Permit Terms

Note: The permittee shall comply with the provisions of Regulation No. 3 concerning APEN reporting. Emission factors that are approved compliance factors specified within this permit can not be adjusted without requiring a permit modification. EFs and/or other emission estimating methods used only to comply with the reporting requirements of this regulation can be updated and modified as specified in Regulation No. 3. These changes by themselves, do not require any permitting activities though the resulting emission estimate may trigger permitting activities.

1. B004 - S004 - 1,112 mmBtu/Hr Pyropower Circulating Fluidized Bed (CFB) Boiler

Coal Fired

Parameter	Permit	Limitations	Emission Factors	Monito	Monitoring		
	Condition Number			Method	Interval		
Particulate Matter	1.1.1	0.03 lb/mmBtu		Baghouse	See Condition		
(PM)	1.1.2	0.03 lb/mmBtu		Maintenance and Source Testing	1.1		
	1.1.3	0.1 lb/mmBtu		Recordkeeping and			
	1.1.4	135.9 tons/year	From Source Testing	Calculation	Monthly and Annually		
			Required by Condition 1.1		Aillually		
PM_{10}	1.2	131.0 tons/year	From Source Testing Required By Condition 1.1	Calculation and Recordkeeping	Monthly and Annually		
SO ₂	1.3.1	1.2 lbs/mmBtu and 90% reduction, or 70% reduction when <.6 lb/mmBtu - 30 day rolling avg		Fuel Sampling and Recordkeeping Continuous	Percent Reduction – Daily Continuous		
	1.3.2	1.2 lbs/mmBtu - 3 hour avg		Emission Monitor			
	1.3.3	0.4 lb/mmBtu,30 day rolling average					
	1.3.4	1598.9 tons/year					
NO_x	1.4.1	0.5 lb/mmBtu, 30 day rolling avg		Continuous Emission Monitor	Continuous		
	1.4.2	0.5 lb/mmBtu, 30 day rolling average					
	1.4.3	1987.9 tons/year					
CO and VOC	1.5	VOC: 13.7 tons/year	<u>In lbs/ton</u> CO -0.801	Recordkeeping and	Monthly and		
		CO: 218.9 tons/year	VOC - 0.050	Calculation	Annually		
			or stack test data				
Fuel Use	1.6	546,816 tons/year		Recordkeeping	Monthly		
Fuel Sampling	1.7			ASTM Methods	Quarterly		

Continuous Emission Monitoring Requirements	1.8			See Condition 1.8	
Lead (Pb) - State Only	1.9	1.5 micrograms per standard cubic meter averaged over a one-month period	9.1 x 10 ⁻⁶ lb/ton, or stack test results	Modeling, Recordkeeping and Calculation	See Condition 1.9
Opacity	1.10	Not to exceed 20%, except as provided for in 1.11, below		Continuous Opacity Monitor	Continuous, Six Minute Intervals
	1.11	For certain operational activities, not to exceed 30%, for a period or periods aggregating more than six (6) minutes in any 60 consecutive minutes		Continuous Opacity Monitor	Continuous, Six Minute Intervals
	1.12 (NSPS)	Not to exceed 20%, except for one 6-minute period not more than 27% per hour		Continous Opacity Monitor	Continuous, Six Minute Intervals
	1.13 (PSD)	Not to exceed 20%		Continuous Opacity Monitor or Method 9	Continuous Twice/Day
Acid Rain	1.14	See Section III	of this Permit	Certification	Quarterly
Cleaning Material Disposal	1.15	See Condition 1.15			
Contaminated Soil Disposal	1.16	See Condition 1.16			
Sandblasting Grit	1.17	See Condition 1.17			
Excess Emission Reports for PSD Permit Limits	1.18	Notify not more than 48 hours after discovery and provide written information within 10 days			

- 1.1 Particulate Matter (PM) emissions shall not exceed the following limits.
 - 1.1.1 0.03 lb/mmBtu heat input (PSD Permit). Compliance with this limit shall be determined per the stack testing requirements of Section II, Condition 1.1.6. (PSD Permit and Colorado Regulation No. 1, Section III.A.2) In the absence of credible evidence to the contrary, compliance with this PM emissions limit shall be assumed provided: the baghouse operation and maintenance requirements set forth in Section II, Condition 1.1.5 are met and the periodic stack testing results as required in Section II, Condition 1.1.6 demonstrate compliance. See Section II, Condition 1.18.

Issued: June 1, 2002

1.1.2 0.03 lb/mmBtu (Construction Permit 84MO120(1) and 40 CFR Part 60, Subpart Da, as adopted by reference in Colorado Regulation No. 6, Part A).

This limit applies at all times except during periods of startup, shutdown, or malfunction. (60.46a(c)). The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility; or any malfunction of the air pollution control equipment.(60.7(b))

At all times, including periods of startup, shutdown, or malfunction, this source is subject to the good air pollution control practices set forth in Section II, Condition 10. of this permit. (60.11(d))

- 1.1.3 0.1 lb/mmBtu heat input (Colorado Regulation No. 1, III.A).
- 135.9 tons of PM per year. Compliance with the annual limit shall be determined on a rolling 1.1.4 twelve month total. By the end of each month a new 12 month total is calculated using the previous twelve months' data. (Construction Permit 84MO120(1))

Compliance with this limit shall be monitored by meeting the coal consumption limits set forth in Section II, Condition 1.6, by maintaining and operating the baghouse as described below, and through results of the stack test required below.

Compliance with these standards shall be monitored as follows:

- 1.1.5 Baghouse Operation and Maintenance Requirements
 - 1.1.5.1 The baghouse shall be equipped with an operable pressure drop measuring device. Daily readings shall be recorded and compared with the manufacturer's recommended operating range. Documentation of the manufacturer's recommended operating range shall be maintained and made available to the Division upon request. Readings that are outside the range shall be cause for investigation. The results of any related maintenance work performed shall be documented in either hardcopy or electronic form and made available to the Division upon request. All records shall be retained for a minimum of five years.
 - 1.1.5.2 The baghouse shall be checked daily to verify operability. An inoperable or malfunctioning hopper shall be cause for investigation. A description of any related maintenance work shall be documented in either hardcopy or electronic form by utilizing a "maintenance request," and made available to the Division upon request. All records shall be retained for a minimum of five years.
 - 1.1.5.3 Routine maintenance of and operational procedures performed on the baghouse shall be conducted in accordance with manufacturer's specifications and good engineering

Operating Permit No. 96OPMO168 Issued: June 1, 2002

practices. The permittee shall develop a written document which identifies the operations and procedures developed in accordance with good engineering practices that must be followed to ensure that the source and the air pollution control equipment is maintained and operated properly to minimize emissions. Any maintenance work performed shall be documented in either hardcopy or electronic form by utilizing a "maintenance request," and made available to the Division upon request. All records shall be retained for a minimum of five years.

1.1.5.4 The baghouse shall be internally inspected for bag integrity as set forth in the "Baghouse Internal Inspection Procedures." (Appendix H of this permit) The procedures set forth in Appendix H are federally and state enforceable.

1.1.6 Stack Testing

Performance testing for particulate emissions shall be performed annually, in accordance with the requirements and procedures set forth in EPA Test Method 5 as set forth in 40 CFR Part 60, Appendix A, except that: (1) if the first annual test results indicate emissions are less than or equal to 50% of the emission limit, no additional tests are required during the permit term; (2) if the first annual test results indicate emissions are more than 50%, but less than or equal to 75% of the emission limit, another test is not required until within one year of expiration of this permit; (3) if the first annual test results indicate emissions are greater than 75% of the emission limit, an annual test is required until the provisions of (1) or (2) are met except that if test results are greater than 75% of the standard for three consecutive years the source may petition the Division to waive the testing requirements for one or both of the remaining two years of the permit term; (4) for sources subject to a 0.03 lb/mmBtu limit, if the initial test result is less than 0.02 lb/mmBtu, no additional testing is required during the permit term. A stack testing protocol shall be submitted for Division approval at least thirty (30) calendar days prior to any performance of the test required under this condition. No stack test required herein shall be performed without prior written approval of the protocol by the Division. The Division reserves the right to witness the test. In order to facilitate the Division's ability to make plans to witness the test, notice of the date(s) for the stack test shall be submitted to the Division at least thirty (30) calendar days prior to the test. The Division may for good cause shown, waive this thirty (30) day notice requirement. In instances when a scheduling conflict is presented, the Division shall immediately contact the permittee in order to explore the possibility of making modifications to the stack test schedule. The required number of copies of the compliance test results shall be submitted to the Division within forty-five (45) calendar days of the completion of the test unless a longer period is approved by the Division.

Annual emissions of PM for purposes of APEN reporting and payment of annual fees will be determined using the emission factor for PM determined from the source testing required in Section II, Condition 1.1.6 and the annual fuel usage, as required by Condition 1.6 in the following equation:

Operating Permit No. 960PM0168

Issued: June 1, 2002

PM: Tons/yr = [EF (lbs/mmBtu) x fuel usage (tons/yr) x heat content of fuel (mmBtu/ton)]/2000 lbs/ton

The heat content of the fuel shall be the average heat content of the fuel as determined by fuel sampling required in Section II, Condition 1.7.

1.2 PM₁₀ emissions shall not exceed 131.0 tons/year. (Construction Permit 84 MO120(1)) Compliance with the annual limits shall be demonstrated on a rolling 12 month total. By the end of each month a new twelve month total is calculated using the previous twelve months' data. Compliance with this limit shall be monitored by meeting the coal consumption limits set forth in Section II, Condition 1.6, by maintaining and operating the baghouse as described in Section II, Condition 1.1.5, and through results of the stack test required in Section II, Condition 1.1.6.

Annual emissions of PM_{10} for purposes of APEN reporting and payment of annual fees will be determined using the emission factor for PM determined from the source testing required in Condition Section II, 1.1.6 and the annual fuel usage, as required by Section II, Condition 1.6 in the following equation:

 PM_{10} : Tons/yr = 0.729 x (Annual Emissions of PM as determined under Section II, Condition 1.1)

The heat content of the fuel shall be the average heat content of the fuel as determined by fuel sampling required in Section II, Condition 1.7.

Alternatively, PM_{10} emissions may be determined using a PM_{10} factor developed from stack testing, approved by the Division as set forth in Regulation No. 3.

- 1.3 SO₂ emissions shall not exceed the following standards.
 - 1.3.1 1.2 lbs/mmBtu and 90% reduction of the potential combustion concentration, or 70% reduction of the potential combustion concentration when emissions are less than 0.60 lb/mmBtu, based on a 30 day rolling average (Construction Permit 84MO120(1), and 40 CFR 60, Subpart Da).

This standard applies at all times except during periods of startup, shutdown, or when both emergency conditions exist (as defined in Subpart Da) and the procedures under paragraph (d) of 60.46a are implemented.(60.46a(c))

The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or device is inoperative.(60.7(b))

At all times, including periods of startup, shutdown, or malfunction, this source is subject to the good air pollution control practices set forth in Section II, Condition 10. of this permit. (60.11(d))

Those instances during startup, shutdown and emergency conditions when the SO_2 limit set forth in this Section II, Condition 1.3.1 is exceeded shall be identified in the Excess Emission Report required in Condition 11.5. (60.7(c))

Compliance is determined by calculating the arithmetic average of all hourly emission rates for SO_2 for the 30 successive boiler operating days, except for data obtained during startup, shutdown, or emergency conditions. Compliance with the percentage reduction requirement for SO_2 is determined based on the average inlet and average outlet SO_2 emission rates for the 30 successive boiler operating days (60.46a(g)).(Note: 60.47a(b)(3) states that an "as fired" fuel monitoring system (upstream of coal pulverizers) meeting the requirements of Method 19 (Appendix A) may be used to determine potential sulfur dioxide emissions in place of a continuous sulfur dioxide emission monitor at the inlet to the sulfur dioxide control device as required under 60.47a(b)(1). The Nucla boiler does not have an SO_2 control device, therefore fuel sampling analysis is used as the monitoring system to determine potential SO_2 emissions, and compliance with this standard.)

1.3.2 1.2 lbs/mmBtu heat input (Colorado Regulation No. 1, VI.A.3.a(ii))

The averaging time shall be a three hour rolling average. (Colorado Regulation No. 1, IV.A.1)

1.3.3 0.4 lb/mmBtu (Colorado Regulation No. 6, Part B, II.D.1.c, and Construction Permit 84MO120(1)), based on a 30 day rolling average (Construction Permit 84MO120(1) - **State-Only** requirement).

Colorado Regulation No. 6, Part B, A.1 incorporates 40 CFR Part 60, Subpart A by reference. Subpart A provisions are as follows:

This standard applies at all times except during periods of startup, shutdown, or malfunction.

The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or device is inoperative.(60.7(b))

At all times, including periods of startup, shutdown, or malfunction, this source is subject to the good air pollution control practices set forth in Section II, Condition 10. of this permit. (60.11(d))

Those instances during startup, shutdown and emergency conditions when the SO_2 limit set forth in this Section II, Condition 1.3.3 is exceeded shall be identified in the Excess Emission Report required in Section II, Condition 11.5.(60.7(c))

1.3.4 1598.9 tons of SO₂ per year. Compliance with the annual limit shall be determined on a rolling twelve month total. By the end of each month a new 12 month total is calculated using the previous twelve months' data. (Construction Permit 84MO120(1))

Compliance with these standards shall be monitored using the continuous emission monitor (CEM) required by Section II, Condition 1.8 of this permit.

Annual emissions of SO₂ for APEN reporting and fee purposes shall be determined from the Continuous Emission Monitors (CEMs) required by Section II, Condition 1.8.

- 1.4 NO_X emissions shall not exceed the following standards.
 - 1.4.1 0.50 lb/mmBtu of heat input, based on a 30 day rolling average. (PSD Permit) See Section II, Condition 1.18.
 - 1.4.2 0.5 lb/mmBtu, determined on a 30 day rolling average basis (40 CFR Part 60, Subpart Da, as adopted by reference in Colorado Regulation No. 6, Part A, and Construction Permit 84MO120(1)).

This standard applies at all times except during periods of startup, shutdown, or malfunction. (60.46a(c))

The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or device is inoperative.(60.7(b))

At all times, including periods of startup, shutdown, or malfunction, this source is subject to the good air pollution control practices set forth in Section II, Condition 10. of this permit. (60.11(d))

Those instances during startup, shutdown or malfunctions when the NO_x limit set forth in this Section II, Condition 1.4.2 is exceeded shall be identified in the Excess Emission Report required in Section II, Condition 11.5.(60.7(c))

Compliance is determined by calculating the arithmetic average of all hourly emission rates for NO_x for the 30 successive boiler operating days, except for data obtained during startup, shutdown, or malfunction conditions.(60.46a(g)).

- 1.4.3 1987.9 tons of NO_x per year. Compliance with the annual limit shall be determined on a rolling twelve month total. By the end of each month a new 12 month total is calculated using the previous twelve months' data. (Construction Permit 84MO120(1))
 - Compliance with these standards shall be monitored using the continuous emission monitor (CEM) required by Section II, Condition 1.8 of this permit.
 - Annual emissions of NO_X for APEN reporting and fee purposes shall be determined from the Continuous Emission Monitors (CEMs) required by Section II, Condition 1.8.
- 1.5 Annual VOC and CO emissions shall not exceed the limits listed in the above table. (Construction Permit 84MO120(1), revised according to Section I, Condition 1.3 of this permit, to reflect a revised VOC emission factor) Compliance with the annual limits shall be demonstrated on a rolling 12 month total. By the end of each month (the thirteenth month) a new twelve month total is calculated using the previous twelve months' data. Compliance with these limits shall be monitored by meeting the coal consumption limits set forth in Condition 1.6.

The emission factors listed above have been approved by the Division and shall be used to calculate CO and VOC emissions from the boiler (CO and VOC: Stack Test). Annual emissions for purposes of APEN reporting and the payment of annual fees shall be calculated using the above emission factors and the annual fuel usage, as required by Condition 1.6, in the following equation:

Tons/yr = [EF (lbs/ton) x annual fuel usage (tons/yr) / 2000 (lbs/ton)] or

Tons/yr = [EF (lbs/mmbtu) x annual fuel usage (tons/yr) x heat content of fuel (mmbtu/ton)/2000 (lbs/ton)]

The heat content of the fuel shall be the average heat content of the fuel as determined by fuel sampling required in Section II, Condition 1.7.

- 1.6 Annual coal consumption shall not exceed 546,816 tons per year (Construction Permit 84MO120(1)). Compliance with the annual limit shall be determined on a rolling 12 month total. By the end of each month a new twelve month total is calculated using the previous twelve months data. Monthly records of the actual consumption shall be maintained by the applicant and made available for inspection upon request. Feeder integrators will be used to monitor the amount of coal combusted. The feeder integrator shall be calibrated on an annual basis.
- 1.7 Coal shall be sampled quarterly to determine the heat content, weight percent sulfur and weight percent ash in the coal. Prior to the first coal sampling event, a coal sampling plan shall be submitted to the Division for approval. The coal sampling plan shall at a minimum include the elements identified in Appendix G. The sulfur, ash and heat content of the coal shall be determined by sampling and testing the coal in accordance with the Division approved coal sampling plan. Alternatively, vendor receipts,

Operating Permit No. 96OPMO168 Issued: June 1, 2002

invoices, contracts, or other information may be used to provide the values for sulfur, ash and heat content. Such alternative information shall indicate that coal sampling and analyses have been performed in accordance with the ASTM procedures, or equivalent, identified in Appendix G.

- For this unit, the source shall install, certify and operate continuous emission monitoring (CEM) equipment for measuring opacity, SO₂, NO_X (including diluent gas: either CO₂ or O₂), and volumetric flow (40 CFR Part 60 as adopted by reference in Colorado Regulation No. 6, Part A, and Part 75 as adopted by reference in Colorado Regulation No. 18 and Colorado Regulation No. 1, Section IV.B.1, 2 and 3). In addition, the permittee shall use "as-fired" fuel sampling and analysis meeting the requirements of Method 19 (40 CFR Part 60, Appendix A) to determine potential SO₂ emissions, as required in 40 CFR, Part 60, Subpart Da. In addition, Construction Permit 84MO120(1) requires CEMs shall be installed, calibrated, and maintained for opacity, SO₂, NO_x, and O₂ or CO₂. The Construction Permit indicates fuel sampling and analysis and continuous SO₂ emission monitor will be required to show compliance with Regulation No. 6, Part A, Subpart Da, Section 60.43a, standard for SO₂. The CEM systems shall meet the requirements in Section II, Condition 11. and Section III of this permit.
- 1.9 Emissions of Lead (Pb) shall not be such that emissions result in an ambient lead concentration exceeding 1.5 micrograms per standard cubic meter averaged over a one-month period (Colorado Regulation No. 8, Part C, Section I.B). The permittee submitted modeling demonstrating compliance with this applicable requirement. A copy of the modeling shall be maintained for inspection upon request.

In addition, annual emissions of lead shall be calculated for the purposes of APEN reporting and payment of annual fees using the emission factor identified in the table (EPA's Compilation of Emission Factors (AP-42), September 1998, Section 1.1), and appropriate baghouse control efficiency in the following equation:

Tons/yr = $[EF(lbs/Btu) \times heat content of coal (Btu/ton) \times annual fuel use (tons/yr) / 2,000 (lbs/ton)]$

The average heat content of coal, determined by analysis as required in Condition 1.7, for the year shall be used in this equation.

The permittee may use stack test results approved by the Division in lieu of the listed AP-42 emission factor.

1.10 Opacity – Regulation No. 1, II.A.1

Except as provided in Section II, Condition 1.11, below, no owner or operator of a source shall allow or cause the emission into the atmosphere of any air pollutant which is in excess of 20% opacity. Visible emissions shall be measured by EPA Method 9 (40 CFR Part 60, Appendix A (July. 1992)), unless otherwise specified in this

t No. 96OPMO168 Issued: June 1, 2002

permit. (Colorado Regulation No. 1, Section II.A.1) Note: This opacity limit applies during periods of shutdown and to offline emissions.

The permittee shall operate, calibrate, and maintain a continuous in-stack monitoring device for the measurement of opacity. Unless otherwise specified in this permit, the continuous opacity monitor (COM) shall be used to monitor compliance with the 20% opacity limit as set forth above. The requirements for the opacity monitoring system are defined in Section II, Condition 11 of this permit.

1.11 Opacity – Regulation No. 1, II.A.4

No owner or operator of a source shall allow or cause to be emitted into the atmosphere any air pollutant resulting from the building of a new fire, cleaning of fire boxes, soot blowing, start-up, any process modification, or adjustment or occasional cleaning of control equipment, which is in excess of 30% opacity as measured by EPA Method 9 (unless otherwise specified in this permit) for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes. (Colorado Regulation No. 1, II.A.4)

The permittee shall operate, calibrate, and maintain a continuous in-stack monitoring device for the measurement of opacity. Unless otherwise specified in this permit, the continuous opacity monitor (COM) shall be used to monitor compliance with the 30% opacity limit set forth above. The requirements for the opacity monitoring system are defined in Section II, Condition 11 of this permit.

A record shall be kept of the type, date and time of the commencement and completion of each and every condition subject to Colorado Regulation No. 1, II.A.4 that results in an exceedance. The records shall be made available for review upon request by the Division.

1.12 **NSPS** Opacity Requirement

No owner or operator subject to the provisions of this subpart (40 CFR Part 60, Subpart Da, shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. (40 CFR Part 60, Subpart Da, 60.42a(b))

This opacity standard applies at all times except during periods of startup, shutdown, or malfunction. The permittee shall use good air pollution control practices as set forth in Section II, Condition 10. of this permit (40 CFR Part 60, Subpart A, 60.11(c.) and (d) as adopted by reference in Colorado Regulation No. 6, Part A)

The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility, and any malfunction of the air pollution control equipment (40 CFR Part 60, Subpart A, 60.7(b) as adopted by reference in Colorado Regulation No. 6, part A) For the purposes of the reports required under 60.7, periods of excess emissions are defined as all 6-minute periods during which the average opacity exceeds the applicable opacity standards under 60.42a(b). Opacity levels in excess of the

Issued: June 1, 2002

applicable opacity standard and the date of such excesses are to be submitted to the Division each calendar quarter. (60.49a(h))

Compliance with this limit shall be monitored using the COM required in Section II, Condition 11 of this permit.

1.13 PSD Opacity Requirement

Opacity shall be limited to 20% as averaged over any six-minute period. (PSD Permit) – See Section II, Condition 1.18.

Compliance with the opacity limit shall be based on continuous emission monitoring or Reference Method 9 opacity observations. (PSD Permit)

Requirements for a COM are set forth in Section II, Condition 11 of this permit.

If Method 9 is used to monitor compliance, an inspection for visible emissions shall be performed at least twice per day: once in the morning and once in the afternoon, during daylight hours. During such inspections, if visible emissions other than steam persist for more than six (6) minutes, a certified observer shall perform an EPA Method 9 visual opacity observation (in accordance with 40 CFR Part 60, Appendix A) within a reasonable amount of time, not to exceed one-half hour. If any such observation indicates an exceedance of the applicable limit, additional observations shall be performed. Consecutive observations shall be performed until two consecutive observations indicate compliance with the applicable standard. Subject to the provisions of C.R.S. 25-7-123.1 and in the absence of credible evidence to the contrary, excedance of the limit shall be considered to exist from the time a Method 9 reading is taken that shows an exceedance of the opacity limit until a Method 9 reading is taken that shows the opacity is less than the opacity limit. All Method 9 readings shall be conducted by a certified observer.

Records of the results of visible emission inspections and Method 9 readings and a copy of the Method 9 reader's certification shall be kept on site and made available to the Division upon request. Copies of any observations exceeding the applicable standard(s) shall be submitted with the next scheduled report.

1.14 This unit is subject to the Title IV Acid Rain Requirements. As specified in 40 CFR Part 72.72(b)(1)(x), the acid rain permit requirements shall be a complete and segregable portion of the Operating Permit. As such the requirements are found in Section III of this permit. The source shall demonstrate compliance with the Acid Rain requirements by submitting quarterly reports/compliance certifications and annual reports/compliance certifications as specified in Section III.4 of this permit.

- 1.15 The permittee may dispose of spent boiler tube cleaning materials in the CFB boiler according to the following conditions.
 - 1.15.1 The air pollution control equipment shall be operating, and the steam generating unit shall be at operating temperature and engaged in electrical generation for the complete time of the disposal operation.
 - 1.15.2 Records of the following information shall be maintained and made available to the Division for inspection upon request: estimated total amount of both solid and liquid materials destroyed; estimated start and completion dates and the estimated amount of time required for the destruction activity; a copy of any COM values exceeding the applicable standard during the disposal operation.
 - 1.15.3 The permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the scenario under which it is operating. (Colorado Regulation No. 3, Part A, IV.A.1, as referred to in Part C, V.C.14). This log shall be made available to the Division for inspection upon request.
- 1.16 The permittee may dispose of petroleum contaminated soil in the CFB boiler according to the following conditions.
 - 1.16.1 Only soil containing non-hazardous petroleum materials shall be destroyed in the boilers. The Annual Certification shall include a statement that only non-hazardous petroleum material was destroyed in the boilers.
 - 1.16.2 The air pollution control equipment shall be operating, and the steam generating unit shall be at operating temperature and engaged in electrical generation for the complete time of the disposal operation.
 - 1.16.3 Records of the following information shall be maintained and made available to the Division for inspection upon request: the estimated amount of soil and the amount of petroleum material destroyed; a description of the type of petroleum contaminant destroyed, and a statement that the contaminant was non-hazardous; the estimated start and completion dates and the estimated amount of time required for the destruction activity; a copy of any COM values exceeding the applicable standard during the disposal operation.
 - 1.16.4 The permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the scenario under which it is operating. (Colorado Regulation No. 3, Part A, IV.A.1, as referred to in Part C, V.C.14). This log shall be made available to the Division for inspection upon request.

Operating Permit No. 96OPMO168 Issued: June 1, 2002

- 1.17 The permittee may utilize non-hazardous sandblasting grit by mixing it with bottom ash and employing is as suspension material in the combustor of the CFB during start-up according to the following conditions.
 - 1.17.1 Records of the following information shall be maintained and made available to the Division for inspection upon request: the estimated amount of sandblasting grit material used during each start-up; a copy of the Material Safety Data Sheet for the grit material; a copy of any COM values exceeding the applicable standard during start-ups when grit material is utilized.
 - 1.17.2 The permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the scenario under which it is operating. (Colorado Regulation No. 3, Part A, IV.A.1, as referred to in Part C, V.C.14). This log shall be made available to the Division for inspection upon request.
- 1.18 For the limits in this permit which are indicated to be limits taken from the PSD permit, the following excess emission reporting requirement applies (PSD Permit). This requirement is in addition to any other reporting requirements required by this permit or other applicable requirement.

The permittee shall notify the Division as soon as possible, but no later than 48 hours after discovery of excess emissions during periods of startup, shutdown, equipment malfunctions, or process upset. Within 10 days of discovery, all of the following information shall be provided to the Division in writing:

- a. The identity of the stack or other emission point where excess emissions occurred.
- b. The magnitude of excess emissions expressed in terms of permit conditions.
- c. Pertinent operating data during the time of upset.
- d. The time and duration of excess emissions.
- e. The identity of the equipment or process causing the upset and the suspected reasons for the upset.
- f. Steps and procedures taken during the upset period to minimize excess emissions.
- g. Steps and procedures taken or anticipated to be taken to prevent recurrence of the upset conditions.

If the Division determines that the information submitted does not evidence unavoidable malfunction or upset condition, failure to meet limitations described in the PSD permit will be considered a violation of the permit (the applicable requirements listed in this Operating Permit).

2. B004 - S004 - 1,112 mmBtu/Hr Pyropower Circulating Fluidized Bed (CFB) Boiler Propane

- 2.1 The permittee shall maintain records of annual usage of propane, and the associated annual heat content. If the total annual heat content of propane exceeds 5 percent of the total heat content of all fuels combusted, this permit shall be reopened to incorporate appropriate applicable requirements for combusting combined/alternative fuels.
- 2.2 Combustion of propane shall not exceed 1.3 x 10⁶ gallons per year (Construction Permit 84MO120(1)). Compliance with the annual limit shall be determined on a rolling 12 month total. By the end of each month a new twelve month total is calculated using the previous twelve months' data. Fuel use shall be recorded monthly and maintained to be made available to the Division upon request. The quantity of propane combusted in the CFB will be calculated based on the quantity of total propane consumed at the Nucla Station less the quantity of propane combusted by other emission sources at the Nucla Station. Records of the dates, times, and boiler operating status during propane use shall be maintained and made available to the Division upon request. Propane flow meters throughout the Nucla Station shall be calibrated on an annual basis.

3. B005 - S005 Cleaver Brooks 25.1 mmBtu/hour Auxiliary Boiler

Parameter	Permit	Limitations	Emission Factors	Moni	toring
	Condition Number			Method	Interval
Propane Use	3.1	250 x 10 ³ gallons/year		Recordkeeping	Monthly
Emission	3.2		(lb/10 ³ gallons)VOC: 0.5	Calculation	Annually
Calculations			CO: 3.2		
			PM: 0.6		
			$PM_{10}:0.6$		
			NOx: 19.0		
PM	3.3.1	See Condition 3.3.1		Fuel Restriction	Continuous
	3.3.2	See Condition 3.3.2			
		State-Only			
Opacity	3.4.1	Not to exceed 20%, except as provided for in 3.4.2, below		Fuel Restriction	Continuous
	3.4.2	For certain operational activities, not to exceed 30%, for a period or periods aggregating more than six (6) minutes in any 60 consecutive minutes			

Issued: June 1, 2002 Last Revised: September 25, 2007

3.4.3	Not to exceed 20%		
	State-Only		

3.1 The auxiliary boiler was determined to be exempt from Construction Permit requirements, based on the proposed fuel consumption limit of 250,000 gallons/year. Compliance with the annual limit shall be determined on a rolling 12 month total. By the end of each month a new twelve month total is calculated using the previous twelve months' data.

A fuel flow meter shall be used to monitor the quantity of propane combusted in the auxiliary boiler. The meter shall be calibrated on an annual basis.

On a daily basis, when the auxiliary boiler is operated, an operator or technician will read and record the quantity of propane combusted for the previous 24-hour period. Records of the monthly fuel use shall be maintained and made available to the Division for inspection upon request.

- 3.2 For APEN reporting and fee purposes, annual actual emission estimates shall be determined using the annual fuel use and the emission factors shown (AP-42, Section 1.5, October, 1996). The permittee shall maintain records of the emissions calculations for Division inspection upon request.
- 3.3 PM emissions shall not exceed the following limits.
 - 3.3.1 (Colorado Regulation No. 1, III.A.1)

$$PE = 0.5(FI)^{-0.26}$$

Where:

PE = Particulate Emission in Pounds per million BTU heat input

FI = Fuel Input in Million BTU per hour

3.3.2 (Colorado Regulation No. 6, Part B, II.C.2 - **State-Only** requirement)

$$PE = 0.5(FI)^{-0.26}$$

Where:

PE = Particulate Emission in Pounds per million BTU heat input

FI = Fuel Input in Million BTU per hour

Colorado Regulation No. 6, Part B, A.1 incorporates 40 CFR Part 60, Subpart A by reference. Subpart A provisions are as follows:

This standard applies at all times except during periods of startup, shutdown, or malfunction.

The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or device is inoperative.(60.7(b))

At all times, including periods of startup, shutdown, or malfunction, this source is subject to the good air pollution control practices set forth in Section II, Condition 10. of this permit. (60.11(d))

In the absence of credible evidence to the contrary, compliance with these emission limits shall be assumed whenever propane is used as a fuel.

3.4 Opacity Limits

- 3.4.1 Except as provided in Condition 3.4.2, below, no owner or operator of a source shall allow or cause emission into the atmosphere of any air pollutant which is in excess of 20% opacity. Visible emissions shall be measured by EPA Method 9 (40 CFR Part 60 Subpart A (July, 1992)). (Colorado Regulation No. 1, II.A.1). Note: This opacity limit applies during periods of shutdown and to offline emissions.
- 3.4.2 No owner or operator of a source shall allow or cause to be emitted into the atmosphere any air pollutant resulting from the building of a new fire, cleaning of fire boxes, soot blowing, start-up, any process modification, or adjustment or occasional cleaning of control equipment, which is in excess of 30% opacity as measured by EPA Method 9 for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Colorado Regulation No. 1, Section II.A.4).
- 3.4.3 Opacity of emissions shall not exceed 20% (Colorado Regulation No. 6, Part B, II.C.3 **State-Only** requirement).

This opacity limit applies at all times except during periods of startup, shutdown, and malfunction, however, at all times, the permittee shall use good air pollution control practices as required by Section II, Condition 10. of this permit. The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in operation of this sources; and any malfunction of the air pollution control equipment. (40 CFR Part 60, Subpart A, as adopted by reference in Colorado Regulation No. 6, Part B, I.A)

In absence of credible evidence to the contrary, compliance with these opacity limits shall be assumed whenever propane is used as a fuel.

4. Coal Handling and Processing

Parameter	Permit			Emission Factors	Monitoring		
	Condition Number				Method	Interval	
Coal Processed	4.1	P101 - On-Site Coal Haulage P104 - Coal Transfer from Truck to Hopper P105 - Primary Crusher, Rotary Breaker/Dischar ge/Loadout/Stoc kpile P106 - Final Crushers, Conveyors, Silos P102 - Main and	650x10 ³ tons/year		Recordkeeping	Monthly	
		Surge Coal Stockpiles P103 - Coal	tons/year 65,000 tons stored (each) 100x10 ³				
		Haulage from Surge Stockpile	tons/year				
PM	4.2	P105 and P106	5.84 tons/year	P105:Primary Crusher:0.020 lb/ton Rotary Breaker:0.05 lb/ton Rotary Breaker Discharge/Loadout/ Stockpile: 0.0024 lb/ton Conveying: 0.0034 lb/ton Main Stockpile Loadout:0.0012 lb/ton P106:Final Crushers: 0.06 lb/ton Silos: 0.0012 lb/ton	Recordkeeping and Calculation	Monthly and Annually	
		P101 - P104	Fugitive PM Emissions:9.71 tons/year	P104: 0.0012 lb/ton	Emission Control Plan, Inspection, and Recordkeeping Calculation	Monthly Annually	

Issued: June 1, 2002 Last Revised: September 25, 2007

PM_{10}	4.2	P105 and P106	2.50 tons/year	P105:Primary Crusher:0.009 lb/ton	Recordkeeping and Calculation	Monthly and Annually
				Rotary Breaker:0.02 lb/ton		
				Rotary Breaker Discharge/Loadout/ Stockpile:0.0012 lb/ton		
				Conveying: 0.0002 lb/ton		
				Main Stockpile Loadout:0.0006 lb/ton		
				P106:Final Crushers: 0.02 lb/ton		
				Silos: 0.0006 lb/ton		
		P101 - P104	Fugitive PM ₁₀ Emissions:2.15 tons/year	P104: 0.0006 lb/ton	Emission Control Plan, Inspection, and Recordkeeping Calculation	Monthly Annually
Opacity	4.3	Not to meet or exceed 20%			Method 9	Semi-
	4.4	Not to exceed 20%, except as provided for below			Maintenance and	Annually
		For certain operational activies - Not to exceed 30%			Inspection	
	4.5	Not to exceed 20%				
Fugitive Emissions	4.6	Particulate Emissions Control Plan			Inspection	Monthly

Note: P106 - These sources are vented via the main boiler stack through the boiler baghouse, therefore the opacity requirements of Section II, Conditions 1.10, 1.11, 1.12, and 1.13 of this permit apply.

4.1 Handling, processing, and storage of coal shall not exceed the amounts shown in the table above. (Construction Permit 96MO742) Compliance with the annual limits shall be determined on a rolling 12 month total. By the end of each month a new twelve month total is calculated using the previous twelve months' data.

Belt scales and feeder integrators shall be used to monitor the quantity of coal handled and processed. The belt scales and feeder integrators shall be calibrated on an annual basis. Truck scales shall be used to monitor the quantity of coal hauled on-site and added to the coal surge stock pile. The truck scales shall be calibrated on an annual basis. An inventory of the amounts of coal stockpile at the main and surge stockpiles shall be maintained.

Issued: June 1, 2002

On a daily basis, when the coal handling and preparation system is operated, plant personnel shall record the quantity of coal processed for each of the processes for the previous 24 hour period. The number of truck loads of coal shall be recorded, including the amount of coal delivered and time of coal delivery. The number of front end loader buckets will be counted and recorded on a daily basis (P103). The permittee shall maintain a record of the main and surge stockpile physical inventory results. All records shall be kept and made available for Division review upon request. Daily totals of the actual throughput shall be maintained, as follows: quantity of coal delivered to the plant site, quantity of coal conveyed to the main stockpile, and the quantity of coal conveyed to the boiler. (Construction Permit 96MO742)

4.2 Total PM emissions from the coal handling and preparation system shall not exceed 5.84 tons/year. Total fugitive PM emissions shall not exceed 9.71 tons/year. Total PM₁₀ emissions shall not exceed 2.50 tons/year. Total fugitive PM₁₀ emissions shall not exceed 2.15 tons/year. (Construction Permit 96MO742) Compliance with the annual limits shall be determined on a rolling 12 month total. By the end of each month a new twelve month total is calculated using the previous twelve months' data.

The permittee shall monitor compliance with annual emission limits by meeting the annual throughput limits contained in Section II, Condition 4.1, as well as meeting the baghouse inspection and maintenance requirements described below. Compliance with emission limits of fugitive PM shall be monitored by not exceeding the throughput limits listed in the table above, and by application of control measures set forth in Section II, Condition 4.6 of this permit.

For APEN reporting and fee purposes, annual estimated PM and PM_{10} emissions (tons/year) shall be calculated using the annual coal throughput, the emission factors listed in the table above (EPA's Compilation of Emission Factors (AP-42), Section 13.2-4, dated January 1995, and Section 11.24, dated August, 1982 (reformatted January, 1995)), and appropriate control equipment collection efficiencies. For fugitive emission estimates, appropriate emission factors or equations shall be used. Records of the emissions calculations shall be maintained and made available to the Division for inspection upon request. The Division used the following control efficiencies to determine emissions for this permit application: Primary coal crusher - 85%; Rotary Breaker - 85%; Coal Hauling - 65%; Coal Truck Unloading -80%; Coal Conveying - 85%; Loadout to Stockpile - 80%; Coal Stockpile - 50%; Surge Stockpile - 50%; Final Coal Crushers - 99.9%; Coal Silos - 99.9%.

Baghouse Operation and Maintenance (P105)

Routine maintenance of and operational procedures performed on the baghouses shall be conducted in accordance with manufacturer's specifications and good engineering practice. These procedures shall be in written format. Maintenance work performed shall be documented and maintained according to internal company operating procedures to be made available to the Division upon request.

4.3 P104, P105 (except for stockpiles) and P106 are subject to 40 CFR Part 60, Subpart Y - New Source Performance Standards for Coal Preparation Plants, as follows.

The permittee shall not discharge into the atmosphere gases which exhibit 20% opacity or greater.

This opacity standard applies at all times except during periods of startup, shutdown, or malfunction. For purposes of the startup, shutdown, and malfunction provision, "facility" as used herein shall mean the coal handling system as a whole. Records of routine start-ups and shutdowns of individual pieces of the coal handling system, such as conveyors, crushers, etc., need not be maintained. The permittee shall use good air pollution control practices as set forth in Section II, Condition 10. of this permit (40 CFR Part 60, Subpart A, 60.11(c.) and (d) as adopted by reference in Colorado Regulation No. 6, Part A)

The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility, and any malfunction of the air pollution control equipment (40 CFR Part 60, Subpart A, 60.7(b) as adopted by reference in Colorado Regulation No. 6, Part A)

An EPA Reference Method 9 visual opacity observation (in accordance with 40 CFR Part 60, Appendix A, as adopted by reference in Colorado Regulation No. 6, Part A) shall be performed at least semiannually. If any such observation indicates an exceedance of the limit, additional observations shall be performed. Consecutive observations shall be performed until two consecutive observations are in compliance with the standard. Subject to the provisions of C.R.S. 25-7-123.1 and in the absence of credible evidence to the contrary, exceedance of the limit shall be considered to exist from the time a Method 9 reading is taken that shows an exceedance of the opacity limit until a Method 9 reading is taken that shows the opacity is less than the opacity limit. All Method 9 readings shall be conducted by a certified observer.

Records of the results of Method 9 readings and a copy of the Method 9 reader's certification shall be kept on site and made available to the Division upon request. Copies of any observations exceeding the applicable standard(s) shall be submitted with the next semi-annual report.

At all other times, in the absence of credible evidence to the contrary, compliance with the opacity limits shall be assumed for all sources controlled by bagfilters provided: the Operating and Maintenance Plan requirements set forth in Section II, Condition 4.2 are met.

Note: For P106, compliance with this limit shall be monitored by meeting the requirements set forth in Section II, Conditions 1.10,. 1.11, and 1.12 of this permit.

- 4.4 P104 and P105 are subject to the opacity limits set forth in Section II, Conditions 9.1 and 9.2 of this permit.
- 4.5 Opacity from the coal handling and storage facilities shall not exceed 20% as averaged over any six-minute period. (PSD Permit) The provisions regarding excess emission reporting set forth in Section II,

- Condition 1.18 of this permit apply to this Section II, Condition 4.5. Compliance with this limit shall be monitored as set forth in Section II, Condition 9 of this permit.
- 4.6 The following Particulate Emissions Control Plan, as set forth in Construction Permit 96MO742, shall be applied to the PM producing sources.
 - 4.6.1 Coal Handling Activities Visible emissions no off-property transport of visible emissions.
 - 4.6.2 Haul Roads No off-property transport of visible emissions shall apply to on-site haul roads, the nuisance guidelines shall apply to off-site haul roads.
 - 4.6.3 Haul Trucks No off-property transport of visible emissions.
 - 4.6.4 Adequate watering and flushing of road surfaces shall be implemented.
 - 4.6.5 Water sprays through spray bars at the truck hopper transfer shall be in operation, as needed, for effective control of emissions.
 - 4.6.6 Emissions from material handling (i.e. removal, loading, and hauling) shall be controlled by watering at all times unless natural moisture is sufficient to control emissions.
 - 4.6.7 Vehicle speed shall not exceed a maximum of 10 m.p.h. Speed limit signs shall be posted.
 - 4.6.8 Unpaved haul roads shall be watered as often as needed to control fugitive particulate emissions.
 - 4.6.9 In connection with coal stockpiling and reclamation activities, sequential extraction of material shall be initiated to keep the total disturbed areas at any one time to a minimum.
 - 4.6.10 Emissions at the transfer to main stockpile shall be minimized by using a lowering well.
 - 4.6.11 The long-term storage portion of the main stockpile shall be compacted using front-end loaders. (Construction Permit 96MO742, as modified according to Section I, Condition 1.3 of this permit)
 - 4.6.12 Adequate surface moisture, to control emissions, shall be maintained in the surge pile, by water spraying if needed.

In addition:

4.6.13 PM emissions from coal handling shall be controlled using water sprays with a chemical wetting agent, as needed, at the unloading station and all coal transfer points. The unloading station shall have spray bars on the entire perimeter of the unloading station. The primary crusher shall be enclosed and the conveyor shall be covered along its entire length. (PSD Permit, as modified according to Section I, Condition 1.3 of this permit)

Operating Permit No. 96OPMO168 Issued: June 1, 2002

A monthly inspection shall be performed to ensure the PM Emission Control Plan measures listed in this condition are in place and effective. Records of inspections shall be maintained and made available for inspection upon request.

The Annual Compliance Certification shall state that these measures are being utilized to minimize emissions.

5. Limestone Preparation

Parameter	Permit	Limitations		Emission Factors	Monitoring	
	Condition Number				Method	Interval
Limestone Processing Rates	5.1	P201 -Limestone Receiving Hoppers, Crushing, Conveyors and Transfers P202 - 900 Ton Limestone Storage Silo P203 - Limestone Pulverizer System & Loading of Surge Hopper & Pneumatic Transporting P204-(2) 135 Ton Limestone Storage Silos P205 - Limestone Hauling, Stockpiling, and Reclamation	87,600 tons/year		Recordkeeping	Monthly
PM	5.2.1 & 5.2.2	All Stacks & Transfer Points on Belt Conveyors	0.05 gram per dscm		Baghouse O&M	

Issued: June 1, 2002 Last Revised: September 25, 2007

	5.3	P201-P204	8.4 tons/year	P201and P202: Limestone Dump to Receiving Hopper:	Recordkeeping and Calculation	Monthly and Annually
				.012 lb/ton		
				Crushing and 900 T Silo: 0.0041 lb/ton		
				P203: 0.0042 lb/ton		
				P204 – 0.0070 lb/ton		
		P205	Fugitive PM Emissions: 5.6		Particulate Control Plan	
			tons/year		Recordkeeping	
					Calculation	
PM_{10}	5.3	P201 – 204	8.3 tons/year	P201 and P202: Limestone Dump to Receiving Hopper: .006 lb/ton		
				Crushing and 900 T Silo: 0.0041 lb/ton P203: 0.0042 lb/ton		
				P204 - 0.0070 lb/ton		
		P205	Fugitive Emissions: 1.2 tons/year		Particulate Control Plan	
			tons, your		Recordkeeping Calculation	
Opacity	5.2.3, 5.2.4, &5.2.5	on belt conveyors not to exceed 7%. Uncaptured emissions not to exceed 10% No visible emissions from buildings			Method 9 Baghouse	Semi-Annually
					Operation and Maintenance	
	5.4	Not to exceed 20%, except as provided for below For certain operational activities – Not to exceed 30%				
	5.5	Not to exceed 10%				
Fugitive Emissions	5.6	Particulate Emissions Control Plan			Inspection	Monthly

5.1 Handling and processing of limestone shall not exceed 87,600 tons/year. (Construction Permit 96MO382)

Compliance with the annual limits shall be determined on a rolling 12 month total. By the end of each month a new twelve month total is calculated using the previous twelve months' data.

Issued: June 1, 2002

Truck scales shall be used to monitor the quantity of limestone delivered to the plant, unloaded at the limestone pile, and unloaded to the limestone truck unloading hopper. A belt scale shall be used to record the quantity of limestone taken from the stockpile and introduced to the limestone handling system. The truck and belt scales shall be calibrated on an annual basis.

The quantity of each limestone delivery to the plant, delivery to the limestone pile, and delivery to the limestone truck unloading hopper will be recorded on a daily basis. Records of monthly handling and processing amounts shall be maintained and made available for inspection upon request.

- 5.2 Emissions from equipment processing limestone, including crusher, pulverizer, storage silos, bucket elevator, conveyors, and transfer points are subject to 40 CFR Subpart OOO, New Source Performance Standards for Nonmetallic Mineral Processing Plants as follows:
 - 5.2.1 Concentration of particulate matter in stack emissions discharged into the atmosphere shall not exceed 0.05 gram per dry standard cubic meter.
 - 5.2.2 Concentration of particulate matter in emissions discharged into the atmosphere from transfer points on belt conveyors shall not exceed 0.05 gram per dry standard cubic meter.
 - 5.2.3 Stack emissions opacity shall not exceed 7 percent.
 - 5.2.4 Opacity of emissions from transfer points on belt conveyors shall not exceed 7 percent.
 - 5.2.5 Opacity of any uncaptured emissions shall not exceed 10 percent.
 - 5.2.6 There shall be no visible emissions from any building enclosing the process equipment, except through the stacks.

These PM and opacity standards apply at all times except during periods of startup, shutdown, and malfunction (40 CFR Part 60, 60.11 (c)), however, at all times, the permittee shall use good air pollution control practices as required by Section II, Condition 10. of this permit. The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in operation of this source; and any malfunction of the air pollution control equipment (40 CFR Part 60, Subpart A, 60.7(b), as adopted by reference in Colorado Regulation No. 6, Part A).

Bagfilter Operation and Maintenance

Routine maintenance of and operational procedures performed on the baghouses shall be conducted in accordance with manufacturer's specifications and good engineering practice. These procedures shall be in written format. Any maintenance work performed shall be documented and maintained to be made available to the Division upon request.

Issued: June 1, 2002

Opacity Monitoring

An EPA Reference Method 9 visual opacity observation (in accordance with 40 CFR Part 60, Appendix A, as adopted by reference in Colorado Regulation No. 6, Part A) shall be performed at least semiannually. If any such observation indicates an exceedance of the limit, additional observations shall be performed. Consecutive observations shall be performed until two consecutive observations are in compliance with the standard. Subject to the provisions of C.R.S. 25-7-123.1 and in the absence of credible evidence to the contrary, exceedance of the limit shall be considered to exist from the time a Method 9 reading is taken that shows an exceedance of the opacity limit until a Method 9 reading is taken that shows the opacity is less than the opacity limit. All Method 9 readings shall be conducted by a certified observer.

Records of the results of Method 9 readings and a copy of the Method 9 reader's certification shall be kept on site and made available to the Division upon request. Copies of any observations exceeding the applicable standard(s) shall be submitted with the next semi-annual report.

At all other times, in the absence of credible evidence to the contrary, compliance with the opacity limits shall be assumed for all sources controlled by bagfilters provided: the Operating and Maintenance Plan requirements set forth above are met.

Total PM emissions from the limestone preparation system shall not exceed 8.4 tons/year. Total fugitive PM emissions shall not exceed 5.6 tons/year. Total PM_{10} emissions shall not exceed 8.3 tons/year. Total fugitive PM_{10} emissions shall not exceed 1.2 tons/year. (Construction Permit 96MO382) Compliance with the annual limits shall be determined on a rolling 12 month total. By the end of each month a new twelve month total is calculated using the previous twelve months' data.

The permittee shall monitor compliance with annual emission limits by meeting the annual throughput limits set forth in Section II, Condition 5.1, as well as meeting the baghouse inspection and maintenance requirements of Section II, Condition 5.2. Compliance with emission limits of fugitive PM and PM_{10} shall be monitored by not exceeding the throughput limits, and by application of control measures set forth in Section II, Condition 5.6 of this permit. In the absence of credible evidence to the contrary, compliance with these requirements shall be assumed provided the annual throughput limits set forth in Section II, Conditions 5.1, 5.2, and 5.6 of this permit are met.

For APEN reporting and fee purposes, annual estimated PM and PM₁₀ emissions (tons/year) shall be calculated using the annual limestone throughput, the emission factors listed in the table above (EPA's Compilation of Emission Factors (AP-42), Section 13.2-4, dated January 1995, and Section 11.24, dated August, 1982 (reformatted January, 1995), the Preliminary Analysis for Construction Permit 96MO382, and September, 1998 stack test results), and appropriate control equipment collection efficiencies. For fugitive emission estimates, appropriate emission factors or equations shall be used. Records of the

emissions calculations shall be maintained and made available to the Division for inspection upon request.

The following control efficiencies were used: Dump to Receiving Hopper – PM – 70% and PM $_{10}$ – 50%.

- 5.4 P201, P202, and P203 are subject to the opacity limits set forth in Section II, Conditions 9.1 and 9.2 of this permit.
- 5.5 Opacity shall not exceed 10% as averaged over any six-minute period from any of the limestone handling activities. (PSD Permit) The provisions regarding excess emission reporting set forth in Section II, Condition 1.18 of this permit apply to this Section II, Condition 5.5. Compliance with this limit shall be monitored as set forth in Section II, Condition 9.
- 5.6 The following Particulate Emissions Control Plan, as set forth in Construction Permit 96MO382, shall be applied to the PM producing sources.
 - 5.6.1 Stockpiling and Reclamation Activities Visible emissions not to exceed 20%, no off-property transport of visible emissions.
 - 5.6.2 Haul Roads No off-property transport of visible emissions shall apply to on-site haul roads, the nuisance guidelines shall apply to off-site haul roads.
 - 5.6.3 Haul Trucks No off-property transport of visible emissions. (Construction Permit 96MO382, as revised according to Section I, Condition 1.3 of this permit)
 - 5.6.4 Only paved roads will be used for hauling of limestone from stockpiles to the receiving hopper. Paved roads shall be kept clean to minimize emissions.
 - 5.6.5 Emissions from hauling shall be controlled by watering as needed. Watering is not needed when surface moisture of the material being handled and cleanliness of paved roads are sufficient to prevent emissions. (Construction Permit 96MO382, as revised according to Section I, Condition 1.3 of this permit)
 - 5.6.6 Reclamation works and sequential extraction of material shall be initiated to keep the total disturbed areas at any one time to a minimum.

In addition:

5.6.7 Limestone handling shall be controlled with an enclosed bucket elevator and fabric filters on the pulverizers and the two silos. (PSD Permit)

A monthly inspection shall be performed to ensure the PM Emission Control Plan measures listed in this condition are in place and effective. Records of inspections shall be maintained and made available for inspection upon request.

The Annual Compliance Certification shall state that these measures are being utilized to minimize emissions.

6. Ash Handling and Processing

Parameter	Permit	Limitations	Emission Factors	Monitoring	
	Condition Number			Method	Interval
Ash Processed	6.1	P301a - Pneumatic Conveyance of Flyash P301b - Pneumatic Conveyance of Bottom Ash P301c - Flyash Silo P301d - Bottom Ash Silo P302a - Truck Loading Flyash - Dry P302b - Truck Loading Bottom Ash - Dry P302c - Truck Loading Flyash - Rotary Unloader P302d - Truck Loading Bottom Ash Rotary Unloader		Recordkeeping	Monthly
PM & PM ₁₀	6.2	PM: 1.96 tons/year PM ₁₀ : 1.93 tons/year	(lb/ton) P301a & c - PM: 0.68 PM ₁₀ : 0.40 P301b&d - PM: 0.34 PM ₁₀ : 0.20 P302a&c - PM: 0.48 PM ₁₀ : 0.28 P302b&d - PM: 0.24 PM ₁₀ : 0.14	Recordkeeping and Calculation	Monthly and Annually
Opacity	6.3	Not to exceed 20%, except as provided for below For certain operational activities - Not to exceed 30%		Method 9 Baghouse Operation and Maintenance	Semi-Annually
				iviaimenance	
	6.4	Not to exceed 10%			

Issued: June 1, 2002 Last Revised: September 25, 2007

- 6.1 Conveyance, storage, and unloading of ash materials (fly ash and bottom ash) shall not exceed 175,000 tons/year. (Construction Permit 98MO0484) Compliance with the annual limits shall be determined on a rolling 12 month total. By the end of each month a new twelve month total is calculated using the previous twelve months' data.
 - A truck scale shall be used to monitor the quantity of ash generated and transported off-site for disposal. The truck scale shall be calibrated on an annual basis. Quantities of ash generated shall be tracked by the truck scale computer printout, including quantity of ash transported to the landfill and the time of delivery. Such records shall be kept and made available for Division review upon request.
- 6.2 Total PM emissions from the ash handling system shall not exceed 1.96 tons/year. Total PM₁₀ emissions shall not exceed 1.93 tons/year. Compliance with the annual limits shall be determined on a rolling 12 month total. By the end of each month a new twelve month total is calculated using the previous twelve months' data. (Construction Permit 98MO0484)

Compliance with emission limits shall be monitored by not exceeding the throughput limit set forth in Section II, Condition 6.1, and by meeting the Baghouse Operation and Maintenance requirements set forth in Section II, Condition 9 of this permit.

For APEN reporting and fee purposes, annual estimated PM and PM₁₀ emissions (tons/year) shall be calculated using the annual ash throughput, the emission factors listed in the table above (Construction Permit 98MO0484), and appropriate control equipment collection efficiencies. Records of the emissions calculations shall be maintained and made available to the Division for inspection upon request.

The Division used the following control efficiencies for this permit application: P301a through d - 98.8% PM and 98% PM $_{10}$; P302a through d - 97% PM and 95% PM $_{10}$.

- 6.3 These sources are subject to the opacity limits set forth in Section II, Conditions 9.1 and 9.2 of this permit.
- The ash storage silo shall be equipped with a filtered vent and opacity shall not exceed 10%. The ash truck loadout shall use a dustless unloader and opacity shall not exceed 10% as averaged over any six minute period. (PSD Permit) The provisions regarding excess emission reporting set forth in Section II, Condition 1.18 of this permit apply to this Section II, Condition 6.4. Compliance with this limit shall be monitored as set forth in Section II, Condition 9.

Operating Permit No. 96OPMO168 Issued: June 1, 2002

7. Ash Hauling and Disposal

Parameter	Permit	Limitations		Emission Factors	Monitoring	
	Condition Number				Method	Interval
Ash Processed	7.1	P303a - Ash Hauling @ Nucla & Ash Hauling @ Disposal Site P303b - Landfill Operations and Wind Erosion	175,000 tons ash/year		Recordkeeping	Monthly
PM & PM ₁₀	7.2	PM: 30.06 tons/year PM ₁₀ : 15.03 tons/year			Emission Control Plan, Inspection, and Recordkeeping Calculation	Monthly Annually
Fugitive Emissions	7.3	Particulate Emissions Control Plan			Inspection	Quarterly
Startup	7.4 & 7.5	Startup w/in 180 days Notify 30 days prior				

7.1 Total ash disposal shall not exceed 175,000 tons/year. (Construction Permit 87MO043F) Compliance with the annual limits shall be determined on a rolling 12 month total. By the end of each month a new twelve month total is calculated using the previous twelve months' data.

A truck scale shall be used to monitor the quantity of ash generated and transported off-site for disposal. The truck scale shall be calibrated on an annual basis. Quantities of ash generated shall be tracked by the truck scale computer printout, including quantity of ash transported to the landfill and the time of delivery. Such records shall be kept and made available for Division review upon request.

7.2 Total fugitive PM emissions shall not exceed 30.06 tons/year. Total fugitive PM₁₀ emissions shall not exceed 15.03 tons/year. Compliance with the annual limits shall be determined on a rolling 12 month total. By the end of each month a new twelve month total is calculated using the previous twelve months' data. (Construction Permit 87MO043F)

Compliance with emission limits of fugitive PM and PM_{10} shall be monitored by not exceeding the throughput limit set forth in Section II, Condition 7.1, and by application of control measures set forth in Section II, Condition 7.3. In the absence of credible evidence to the contrary, compliance with the emissions limits of fugitive PM and PM10 shall be assumed provided the annual throughput limits set forth in Section II, Condition 7.1 are met and the control measures set forth in Section II, Condition 7.3 are followed.

Issued: June 1, 2002

For APEN reporting purposes, annual estimated PM and PM_{10} emissions (tons/year) shall be calculated using appropriate emission factors or equations. Records of the emissions calculations shall be maintained and made available to the Division for inspection upon request.

- 7.3 The following Particulate Emissions Control measures shall be applied, as set forth in Construction Permit 87MO043F.
 - 7.3.1 Stockpiling and Reclamation Activities Visible emissions not to exceed 20%, no off-property transport of visible emissions.
 - 7.3.2 Haul Roads No off-property transport of visible emissions shall apply to on-site haul roads, the nuisance guidelines shall apply to off-site haul roads.
 - 7.3.3 Haul Trucks No off-property transport of visible emissions except that when operating off the property of the owner or operator, the applicable guidelines shall be no off-vehicle transport of visible emissions.
 - 7.3.4 While handling flyash, sufficient moisture content shall be maintained to comply with emission limitation guidelines (7.3.1 through 7.3.3, above). Bottom ash is relatively coarse, and contains high proportions of free lime. Adding of water to bottom ash is undesirable as it creates intense heat and leads to degradation of coarse particles.
 - 7.3.5 Ash shall be watered prior to compacting, and compacted ash shall be watered as necessary in order to comply with the above listed guidelines.
 - 7.3.6 If the compaction and watering of ash is not sufficient to meet the above listed guidelines, surface stabilization chemicals shall be used, and applied according to manufacturer specifications for control of fugitive particulate emissions.
 - 7.3.7 All exposed areas shall be revegetated upon completion of activity.
 - 7.3.8 Vehicle speeds on unpaved roads shall be limited to 30 miles per hour. Speed limit signs shall be posted.
 - 7.3.9 Haul roads shall be of a gravel surface and shall be watered as necessary in order to meet the above listed guidelines.
 - 7.3.10 All mud and dirt carry-out shall be cleaned up at the end of each working day.
 - 7.3.11 Prior to leaving the Nucla Plant, all truckloads of ash shall be covered with a mechanical closing lid or a tight tarp-like cover.

A quarterly inspection shall be performed to ensure the PM Emission Control Plan measures listed in this condition are in place and effective. Records of inspections shall be maintained and made available for inspection upon request.

- 7.4 The permittee shall notify the Division 30 days prior to startup of the expanded (new) landfill area. (Colorado Regulation No. 3, Part B, IV.H.1)
- 7.5 Construction of new/modified sources (the expanded landfill area) must commence within 18 months of issuance of this modified permit (issued:), or within 18 months of the date on which such construction or activity was scheduled to commence as stated in the application. If commencement does not occur within the stated time the permit will expire on: (Colorado Regulation No. 3, Part B, IV.G.4)

8. P401 - Cooling Tower Serving Turbines 1, 2, & 3

P402 - Cooling Tower Serving Turbine 4

Parameter	Permit			Emission Factors	Monitoring	
	Condition Number				Method	Interval
Circulating Water Rate	8.1	Design:P401 - 2,760,000 gallons/hour P402 - 2,400,000 gallons/hour			Design Limit	Records on File
PM	8.2	P401	55.2 tons/year (until 10/1/2007) 0.55 tons/year (starting 10/1/2007) 14.40 tons/year	See Condition 8.2	Emissions Calculation Total Dissolved Solids: Water Sample	Monthly and Annually Weekly
PM ₁₀	8.2	P401	55.2 tons/year (until 10/1/2007) 0.55 tons/year (starting 10/1/2007) 14.40 tons/year			
Opacity	8.3	Not to exceed 20%, except as provided for below For certain operational activities - Not to exceed 30%, for a period or periods aggregating more than six (6) minutes in any 60 consecutive minutes			Nature of Process	
Drift Loss	8.4	S401: 0.05% (until 10/1/2007) S401: 0.0005% (starting			Operating and Maintenance Procedures	As Needed

10/1/2007)		
S402:0.015%		

The maximum design rate for circulating water through Cooling Tower P401 shall not exceed 2,760,000 8.1 gallons/hour. The maximum design rate for circulated water through Cooling Tower P402 shall not exceed 2,400,000 gallons/hour. (Construction Permit 96MO703)

The circulating water pumps are designed such that the maximum design rate for circulating water cannot be exceeded, therefore, no monitoring is required. A record of the design rates shall be maintained on site for Division inspection upon request.

8.2 PM and PM₁₀ emissions shall not exceed the limits listed in the table above. (Construction Permit 96MO703 as modified under the provisions of Section II, condition 1.3) Compliance with annual limits shall be determined on a rolling twelve (12) month total. By the end of each month a new twelve month total shall be calculated using the previous twelve calendar months' data.

Representative samples of circulating water shall be analyzed for total dissolved solids, at least once per week, and records shall be maintained at the site. These records shall be made available for inspection upon request. (Construction Permit 96MO703) The maximum design circulating water flow rate, design drift rate and the total dissolved solids value for each cooling tower shall be used to calculate monthly emissions. The permit holder shall calculate monthly emissions and keep a compliance record on site for Division review. This method shall also be used for APEN reporting and fee purposes.

- 8.3 These sources are subject to the opacity limits set forth in Section II, Conditions 9.1 and 9.2. in the absence of credible evidence to the contrary, compliance with the opacity limits shall be assumed provided the cooling towers are designed and operated as set forth in this Operating Permit.
- 8.4 The system of drift eliminators installed on Cooling Tower P401 shall be operated, inspected, and maintained as per manufacturer's recommendations to assure continued performance, and to limit the total drift loss to 0.0005% based on the circulating water flow rate (Compliance with this limit is required starting 10/1/2007. Prior to this date, compliance with 0.05% is required). The system of drift eliminators installed on Cooling Tower P402 shall be operated, inspected, and maintained as per the manufacturer's recommendations to assure continued performance, and to limit the total drift loss to 0.015% based on the circulating water flow rate.

Copies of the manufacturer's operation, inspection, and maintenance recommendations shall be maintained on site and made available for inspection upon Division request. On an annual basis, the drift eliminator systems shall be inspected for structural integrity and for algae and debris. The permittee shall maintain records of all inspections and maintenance performed. Such records shall include the dates of such inspections and maintenance, and the nature of any inspection and its results, and any maintenance performed. The records shall be maintained on site and made available to the Division for inspection upon request.

Operating Permit No. 96OPMO168

Issued: June 1, 2002

9. Opacity Limits

These limits apply to those sources identified throughout this permit as being subject to the following conditions.

- 9.1 Except as provided in Section II, Condition 9.2, below, no owner or operator of a source shall allow or cause the emission into the atmosphere of any air pollutant which is in excess of 20% opacity. Visible emissions shall be measured by EPA Method 9 (40 CFR Part 60 Subpart A (July, 1992)), unless otherwise specified in this permit. (Colorado Regulation No. 1, II.A.1).
- 9.2 No owner or operator of a source shall allow or cause to be emitted into the atmosphere any air pollutant resulting from the building of a new fire, cleaning of fire boxes, soot blowing, start-up, any process modification, or adjustment or occasional cleaning of control equipment, which is in excess of 30% opacity as measured by EPA Method 9 (unless otherwise specified in this permit) for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Colorado Regulation No. 1, II.A.4).

Unless specific conditions in this permit require otherwise, monitoring for sources subject to Section II, Conditions 9.1 and/or 9.2 shall be performed as follows.

An EPA Reference Method 9 visual opacity observation (in accordance with 40 CFR Part 60, Appendix A, as adopted by reference in Colorado Regulation No. 6, Part A) shall be performed at least semiannually. If any such observation indicates an exceedance of the applicable limit, additional observations shall be performed. Consecutive observations shall be performed until two consecutive observations indicate compliance with the applicable standard. Subject to the provisions of C.R.S. 25-7-123.1 and in the absence of credible evidence to the contrary, excedance of the limit shall be considered to exist from the time a Method 9 reading is taken that shows an exceedance of the opacity limit until a Method 9 reading is taken that shows the opacity is less than the opacity limit. All Method 9 readings shall be conducted by a certified observer.

Records of the results of Method 9 readings and a copy of the Method 9 reader's certification shall be kept on site and made available to the Division upon request. Copies of any observations exceeding the applicable standard(s) shall be submitted with the next scheduled report.

At all other times, in the absence of credible evidence to the contrary, compliance with the opacity limits shall be assumed provided: for those sources controlled by bagfilters, the Operating and Maintenance Plan requirements set forth below are met.

Bagfilter Operation and Maintenance

Routine maintenance of and operational procedures performed on the baghouses shall be conducted in accordance with manufacturer's specifications and good engineering practice. These procedures shall be

in written format. Any maintenance work performed shall be documented and maintained to be made available to the Division upon request.

10. 40 CFR Part 60, Subpart A, 60.11(d) Requirements

This requirement applies to those sources identified throughout this permit as being subject to this condition.

At all times, including periods of startup, shutdown, and malfunction owners and operators shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source (40 CFR Part 60.11(d) as adopted by Reference in Colorado Regulation No. 6, Part A and Colorado Regulation No. 1, Section VI.B.4.a.(iv)).

11. Continuous Emission Monitoring and Continuous Opacity Monitoring Systems

11.1 CEM and COM Monitoring Systems QA/QC Plan

Continuous Emission Monitoring (CEM) and Continuous Opacity Monitoring (COM) systems are required for measurement of the stack SO₂, NO_X (and diluent monitor for either CO₂ or O₂), gas flow rate and opacity emissions. A quality assurance/quality control plan shall be implemented within six (6) months of the issuance date of this permit. This plan shall be made available to the Division upon request. CEM and COM requirements for Part 75 are set forth in Section III of this permit.

11.2 General Provisions

- 11.2.1 The permittee shall ensure that all continuous emission and opacity monitoring systems required are in operation and monitoring unit emissions or opacity at all times that the boiler combusts any fuel except during those periods identified in 40 CFR Part 60, Subparts A, Da, and Appendix F. The permittee shall also ensure, subject to the exceptions just noted, that the continuous opacity monitoring systems required are in operation and monitoring opacity during the time following combustion when fans are still operating unless fan operation is not required to be included under any other applicable requirement.
- 11.2.2 Alternative monitoring system, alternative reference method, or any other alternative for the required continuous emission monitoring systems shall meet the requirements established in 40 CFR Part 60, Subpart 60.47a and Part 75, Subpart E.
- 11.2.3 All test and monitoring equipment, methods, procedures and reporting shall be subject to the review and approval requirements set forth in 40 CFR Parts 60 and 75.

Operating Permit No. 96OPMO168 Issued: June 1, 2002

- 11.2.4 A file shall be maintained of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by applicable portions of 40 CFR Part 60, Subparts A, Da, and Appendices A, B, and F recorded in a permanent form suitable for inspection. (40 CFR Part 60, 60.7(f)) Note: If the permittee maintains records of the data required by this condition, the permittee shall be considered to be in compliance with the requirement to maintain a "file" of the required data.
- 11.2.5 Records shall be maintained of the occurrence and duration of any startup, shutdown, or malfunction, or emergency condition (as defined in Subpart Da) in the operation of the source; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. (60.7(b))
- 11.3 Continuous Emission Monitoring (CEM) Systems
 - 11.3.1 The Continuous Emission Monitoring (CEM) Systems are subject to the requirements of 40 CFR Part 60, Subparts A, Da, and Appendices A, B, and F and shall meet the equipment, installation, and performance specifications therein.
 - 11.3.2 For Acid Rain program monitoring and reporting the Continuous Emission Monitor (CEM) systems are subject to the requirements of 40 CFR Part 75, and Appendix A and B, and shall meet the equipment, installation, and performance specifications therein.
- 11.4 Continuous Opacity Monitoring (COM) Systems
 - 11.4.1 The Continuous Opacity Monitoring (COM) Systems are subject to the requirements of 40 CFR Part 60. Each continuous opacity monitoring system shall meet the design, installation, equipment and performance specifications in 40 CFR Part 60, Appendix B, Performance Specification 1.
 - 11.4.2 The permittee shall follow the quality assurance and quality control procedures of 40 CFR Part 60, Subpart A Section 60.13.
 - When the opacity monitoring system is unable to provide quality assured data in accordance with 40 CFR Part 75, the source may elect to utilize either a backup opacity monitor or EPA Reference Method 9, or an "Operating Report During Monitor Unavailability" to satisfy the requirements for periodic monitoring under 40 CFR 70 and Colorado Regulation No. 3.
 - a. If backup monitors are used, the next quarterly report submitted by the source shall identify the dates and times the backup monitors were in use.

Operating Permit No. 96OPMO168 Issued: June 1, 2002

- b. If EPA Reference Method 9 observations are used, visual observations in accordance with the reference method shall be taken and recorded by the source whenever the source is in operation and the opacity monitoring system has been out of service for more than eight (8) consecutive hours while fuel is present in the boiler.
 - When such circumstances exist, the visual observations shall be performed by a certified opacity observer each 24 hour period thereafter over a thirty minute period until the opacity monitoring system is again able to provide quality assured data. If a visual emissions observation cannot be performed in accordance with EPA Reference Method 9, the source shall record the reasons why that is the case. If any of the EPA Reference Method 9 opacity observations required above exceed the applicable standard, additional EPA Reference Method 9 observations must be performed until two (2) consecutive observations indicate that the source is in compliance with the applicable opacity limitation. Subject to the provisions of C.R.S. 25-7-123.1 and in the absence of credible evidence to the contrary, exceedance of the limit shall be considered to exist from the time a Method 9 reading is taken that shows an exceedance of the opacity limit until a Method 9 reading is taken that shows the opacity is less than the opacity limit.
- c. If an "Operating Report During Monitor Unavailability" is used, the source shall record the opacity monitor registered reading prior to the monitor unavailability period and that immediately following such periods. A source must also record and maintain a description of unit operating characteristics that demonstrate the likelihood of compliance with the applicable opacity limitation. Such operating circumstances shall be identified on a unit specific basis and provided to the Division and shall include information related to the operation of the control equipment and any other operational parameters that may affect opacity.

11.5 Notification and Recordkeeping

The owner or operator of a facility required to install, maintain, and calibrate continuous monitoring equipment shall submit to the Division, by the 30th day following the end of each calendar quarter, a report of excess emissions for all pollutants monitored for that quarter. This report shall consist of all information required in 40 CFR Part 60, Subparts A, Da, Appendix B, and Appendix F, as relevant, and the following information and/or reporting requirements as specified by the Division. (Colorado Regulation No. 1, IV.G)

11.5.1 The magnitude of excess emissions computed in accordance with Division guidelines (the Division guidelines are: using the units of the standard or emission limit, and the same averaging time of the standard, if applicable), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions.

- 11.5.2 The nature and cause of the excess emissions, if known.
- 11.5.3 The date and time identifying each period of equipment malfunction and the nature of the system repairs or adjustments, if any, made to correct the malfunction.
- 11.5.4 A schedule of the calibration and maintenance of the continuous monitoring system.
- 11.5.5 Compliance with the reporting requirements of this section shall not relieve the owner or operator of the reporting requirements of Section II.E of the Common Provisions Regulation concerning upset conditions and breakdowns.

12. Insignificant Activities

12.1 The permittee shall at least annually review and determine whether the insignificant activities are in compliance with all applicable requirements. The permittee shall maintain a record of the compliance determination, and any additions, deletions, or changes to the insignificant source inventory made during the reporting period. The inventory of insignificant sources provided in the permit application is included in Appendix A of this permit as a starting reference.

13. Reporting

All reports shall be postmarked within the first thirty (30) days immediately following the end of the reporting period, unless a different response time is identified elsewhere in this permit. The compliance monitoring report shall be in the format identified in Appendix B of this permit.

Operating Permit No. 96OPMO168 Issued: June 1, 2002

SECTION III - Acid Rain Requirements

1. Designated Representative and Alternate Designated Representative

Designated Representative

Name: Jerry A. Walker

Title: Vice President, Environmental

Phone: (303) 452-6111

Alternate Designated Representative

Name: Joel Buck

Title: Vice President, Generation

Phone: (303) 452-6111

2. Sulfur Dioxide Emission Allowances and Nitrogen Oxide Emission Limitations

Unit 2	2002	2003	2004	2005	2006	2007
SO ₂ Allowances, per 40 CFR Part 73.10(b), Table 2	1113*	1113*	1113*	1113*	1113*	1113*
NO _X Limits	This Unit Has No Acid Rain NO _X limits (see Section5)					

^{*} Under the provisions of \$\textstyle{1}\textstyle{1}\textstyle{1}\textstyle{1}\textstyle{2}\tex

3. Standard Requirements

Unit 1 of this facility is subject to and the source has certified that they will comply with the following standard conditions.

Permit Requirements.

- (1) The designated representative of each affected source and each affected unit at the source shall:
 - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and

- (ii) Submit in a timely manner any supplemental information that the Colorado Air Pollution Control Division determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the Division; and
 - (ii) Have an Acid Rain Permit.

Monitoring Requirements.

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR parts 74, 75, and 76.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR parts 74 and 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Federal Clean Air Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements.

- (1) The owners and operators of each source and each affected unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Federal Clean Air Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.

Operating Permit No. 96OPMO168 Issued: June 1, 2002

- An allowance shall not be deducted in order to comply with the requirements under paragraph (5) (1)(I) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- An allowance allocated by the Administrator under the Acid Rain Program is a limited (6)authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Excess Emissions Requirements.

- The designated representative of an affected unit that has excess emissions in any calendar year (8) shall submit a proposed offset plan to the Administrator of the U. S. EPA, as required under 40 CFR part 77.
- (9) The owners and operators of an affected unit that has excess emissions in any calendar year shall:
 - Pay without demand, to the Administrator of the U. S. EPA, the penalty required, and (i) pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements.

- Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or the Division:
 - The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - All emissions monitoring information, in accordance with 40 CFR part 75; (ii)
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

- Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability.

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or a written exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Federal Clean Air Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Federal Clean Air Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- Any provision of the Acid Rain Program that applies to an affected source (including a provision (5) applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NOx averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Federal Clean Air Act.

Effect on Other Authorities.

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or a written exemption under 40 CFR 72.7 or 72.8 shall be construed as:

Operating Permit No. 96OPMO168 Issued: June 1, 2002

- (1) Except as expressly provided in title IV of the Federal Clean Air Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Federal Clean Air Act, including the provisions of title I of the Federal Clean Air Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Federal Clean Air Act:
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- Interfering with or impairing any program for competitive bidding for power supply in a State in (5) which such program is established.

4. Reporting Requirements

Reports shall be submitted to the addresses identified in Appendix D.

Pursuant to 40 CFR Part 75.64 quarterly reports and compliance certification requirements shall be submitted to the Administrator within 30 days after the end of the calendar quarter. The contents of these reports shall meet the requirements of 40 CFR 75.64.

Pursuant to 40 CFR Part 72.90 (as adopted by reference in Colorado Regulation 18) annual reports and compliance certifications shall be submitted to the Administrator within 60 days after the end of the calendar year. The contents of these reports shall meet the requirements of 40 CFR 72.90. A copy of the compliance certification shall also be submitted to the Division.

Pursuant to 40 CFR Part 75.65 excess emissions of opacity shall be reported to the Division. These reports shall be submitted in a format approved by the Division.

Revisions to this permit shall be made in accordance with 40 CFR Part 72, Subpart H, $\square \square$ 72.80 through 72.85 (as adopted by reference in Colorado Regulation 18). Permit modification requests shall be submitted to the Division at the address identified in Appendix D.

Issued: June 1, 2002

5. Comments, Notes and Justifications:

The Nucla unit is a fluidized bed combustion (FBC) unit and the preamble to the final Phase II NO_X rule (61 FR 67111, December 19, 1996) specifically states that FBC units do not have NO_X emission limits. A telephone conversation with the EPA-HQ, Acid Rain Division confirmed that this was the case.

Note: As set forth in 40 CFR Part 72.22, the alternate designated representative may act in behalf of the designated representative for this acid rain permit.

SECTION IV - Permit Shield

Regulation No. 3, 5 CCR 1001-5, Part C, §§ I.A.4, V.D. & XIII.B; § 25-7-114.4(3)(a), C.R.S.

1. Specific Conditions

Based upon information available to the Division and supplied by the applicant, the following parameters and requirements have been specifically identified as non-applicable to the facility to which this permit has been issued. This shield does not protect the source from any violations that occurred prior to or at the time of permit issuance. In addition, this shield does not protect the source from any violations that occurred as a result of any modifications or reconstruction on which construction commenced prior to permit issuance.

Emission Unit Description &Number	Applicable Requirement	Justification	
CFB Boiler B004 Colorado Regulation No. 1, VI.B.2 (0.4 lb/mmBtu SO ₂)		CFB was an existing source as of the applicable date of this regulation.	
Facility-Wide	Colorado Regulation No. 1, V	Applies to coke ovens at Iron and steel plant operations only.	
	Colorado Regulation No. 1, VII	Applies only to listed electric generating stations owned and operated b the Public Service Company of Colorado	
	Colorado Regulation No. 1, VIII	Applies to listed stationary sources in the Denver PM_{10} nonattainment area only.	
	Colorado Regulation No. 1, IX	Applies only to Refinery Fluid Bed Catalytic Cracking Units located in nonattainment areas for carbon monoxide	
	Colorado Regulation No. 4, and General Condition 29 of this permit	Sale and use of wood burning devices does not apply to the Nucla Station	
	Colorado Regulation No. 7, except for Section V	Applies to sources in ozone nonattainment area. Section VI: Applies in attainment areas, but diesel storage is exempt. Section VII: Applies in attainment areas, but applies to crude oil storage tanks having a capacity of greater than 40,000 gallons.	
	Colorado Regulation No. 8, Part D	Applies only to existing sources wishing to obtain a compliance extension and the Nucla facility has not triggered this provision	
	Colorado Regulation No. 8, Part E	Applies only to source categories cited in 40 CFR Part 63 as of incorporation by reference as of the date of this permit issuance	
	Colorado Regulation No. 9 - Reducing Auto Related Emissions in the Denver Region	Subject matter does not cover the Nucla facility.	
	Colorado Regulation No. 10 - Conformity Determinations Respecting Federal Actions	Subject matter does not cover the Nucla facility.	
	Colorado Regulation No. 11 - Motor Vehicle Emissions Inspection Program	Subject matter does not cover the Nucla facility.	
	Colorado Regulation No. 12 - Reduction of Diesel Vehicle Emissions	Geographic area of applicability does not include the Nucla facility.	

Operating Permit No. 96OPMO168 Issued: June 1, 2002

Colorado Regulation No. 13 - The Oxygenated Fuels Program	Area of geographic applicability does not include the Nucla facility.
Colorado Regulation No. 14 - Alternative Fueled Motor Vehicles	The Nucla facility does not have motor vehicles needing alternative fuel systems.
Colorado Regulation No. 16 - Street Sanding	Geographic area of applicability does not include the Nucla facility.
5CCR 1001-20 - Nonattainment Areas	Nucla facility is not located in geographic areas classified as nonattainment.
Colorado Regulation No. 17 - Clean Fuel Fleet Program	Nucla facility is not located within the area of geographic applicability.
Colorado Regulation No. 19 - Lead Based Paint Abatement	Applies only to homes constructed prior to 1978, child-occupied facilities, and only those projects where the intent is to abate lead-based paint hazards
40 CFR Part 55 - Outer Continental Shelf Air Regulations	Nucla facility is outside the geographic scope of this provision.
40 CFR Part 56 - Regional Consistency	Relates to authorities within the various offices of the EPA.

2. General Conditions

Compliance with this Operating Permit shall be deemed compliance with all applicable requirements specifically identified in the permit and other requirements specifically identified in the permit as not applicable to the source. This permit shield shall not alter or affect the following:

- 2.1 The provisions of §§ 25-7-112 and 25-7-113, C.R.S., or § 303 of the federal act, concerning enforcement in cases of emergency;
- 2.2 The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- 2.3 The applicable requirements of the federal Acid Rain Program, consistent with § 408(a) of the federal act;
- 2.4 The ability of the Air Pollution Control Division to obtain information from a source pursuant to § 25-7-111(2)(I), C.R.S., or the ability of the Administrator to obtain information pursuant to § 114 of the federal act;
- 2.5 The ability of the Air Pollution Control Division to reopen the Operating Permit for cause pursuant to Regulation No. 3, Part C, § XIII.
- Sources are not shielded from terms and conditions that become applicable to the source subsequent to permit issuance.

Issued: June 1, 2002

SECTION V - General Permit Conditions

1. Administrative Changes

Regulation No. 3, 5 CCR 1001-5, Part A, § III.

The permittee shall submit an application for an administrative permit amendment to the Division for those permit changes that are described in Regulation No. 3, Part A, § I.B.1. The permittee may immediately make the change upon submission of the application to the Division.

2. Certification Requirements

Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.B.9., V.C.16.a.& e. and V.C.17.

- a. Any application, report, document and compliance certification submitted to the Air Pollution Control Division pursuant to Regulation No. 3 or the Operating Permit shall contain a certification by a responsible official of the truth, accuracy and completeness of such form, report or certification stating that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
- b. All compliance certifications for terms and conditions in the Operating Permit shall be submitted to the Air Pollution Control Division at least annually unless a more frequent period is specified in the applicable requirement or by the Division in the Operating Permit.
- c. Compliance certifications shall contain:
 - (i) the identification of each permit term and condition that is the basis of the certification;
 - (ii) the compliance status of the source;
 - (iii) whether compliance was continuous or intermittent;
 - (iv) method(s) used for determining the compliance status of the source, currently and over the reporting period; and
 - (v) such other facts as the Air Pollution Control Division may require to determine the compliance status of the source.
- d. All compliance certifications shall be submitted to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit.
- e. If the permittee is required to develop and register a risk management plan pursuant to § 112(r) of the federal act, the permittee shall certify its compliance with that requirement; the Operating Permit shall not incorporate the contents of the risk management plan as a permit term or condition.

3. Common Provisions

Common Provisions Regulation, 5 CCR 1001-2 §§ II.A., II.B., II.C., II, E., II.F., II.I, and II.J

a. To Control Emissions Leaving Colorado

No. 96OPMO168 Issued: June 1, 2002

When emissions generated from sources in Colorado cross the State boundary line, such emissions shall not cause the air quality standards of the receiving State to be exceeded, provided reciprocal action is taken by the receiving State.

b. Emission Monitoring Requirements

The Division may require owners or operators of stationary air pollution sources to install, maintain, and use instrumentation to monitor and record emission data as a basis for periodic reports to the Division.

c. Performance Testing

The owner or operator of any air pollution source shall, upon request of the Division, conduct performance test(s) and furnish the Division a written report of the results of such test(s) in order to determine compliance with applicable emission control regulations.

Performance test(s) shall be conducted and the data reduced in accordance with the applicable reference test methods unless the Division:

- (i) specifies or approves, in specific cases, the use of a test method with minor changes in methodology;
- (ii) approves the use of an equivalent method;
- (iii) approves the use of an alternative method the results of which the Division has determined to be adequate for indicating where a specific source is in compliance; or
- (iv) waives the requirement for performance test(s) because the owner or operator of a source has demonstrated by other means to the Division's satisfaction that the affected facility is in compliance with the standard.
 Nothing in this paragraph shall be construed to abrogate the Commission's or Division's authority to require testing under the Colorado Revised Statutes, Title 25, Article 7, and pursuant to regulations promulgated by the Commission.

Compliance test(s) shall be conducted under such conditions as the Division shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Division such records as may be necessary to determine the conditions of the performance test(s). Operations during period of startup, shutdown, and malfunction shall not constitute representative conditions of performance test(s) unless otherwise specified in the applicable standard.

The owner or operator of an affected facility shall provide the Division thirty days prior notice of the performance test to afford the Division the opportunity to have an observer present. The Division may waive the thirty day notice requirement provided that arrangements satisfactory to the Division are made for earlier testing.

The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

- i. Sampling ports adequate for test methods applicable to such facility;
- (v) Safe sampling platform(s);
- (vi) Safe access to sampling platform(s); and
- (vii) Utilities for sampling and testing equipment.

Each performance test shall consist of at least three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic mean of results of at least three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the owner or operator's control, compliance may, upon the Division's approval, be determined using the arithmetic mean of the results of the two other runs.

Nothing in this section shall abrogate the Division's authority to conduct its own performance test(s) if so warranted.

d. Affirmative Defense Provision for Excess Emissions during Malfunctions

Note that until such time as the U.S. EPA approves this provision into the Colorado State Implementation Plan (SIP), it shall be enforceable only by the State.

An affirmative defense to a claim of violation under these regulations is provided to owners and operators for civil penalty actions for excess emissions during periods of malfunction. To establish the affirmative defense and to be relieved of a civil penalty in any action to enforce an applicable requirement, the owner or operator of the facility must meet the notification requirements below in a timely manner and prove by a preponderance of evidence that:

- (i) The excess emissions were caused by a sudden, unavoidable breakdown of equipment, or a sudden, unavoidable failure of a process to operate in the normal or usual manner, beyond the reasonable control of the owner or operator;
- (ii) The excess emissions did not stem from any activity or event that could have reasonably been foreseen and avoided, or planned for, and could not have been avoided by better operation and maintenance practices;
- (iii) Repairs were made as expeditiously as possible when the applicable emission limitations were being exceeded:
- (iv) The amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions;
- (v) All reasonably possible steps were taken to minimize the impact of the excess emissions on ambient air quality;
- (vi) All emissions monitoring systems were kept in operation (if at all possible);
- (vii) The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence;
- (viii) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
- (ix) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions. This section is intended solely to be a factor in determining whether an affirmative defense is available to an owner or operator, and shall not constitute an additional applicable requirement; and
- (x) During the period of excess emissions, there were no exceedances of the relevant ambient air quality standards established in the Commissions' Regulations that could be attributed to the emitting source.

The owner or operator of the facility experiencing excess emissions during a malfunction shall notify the division verbally as soon as possible, but no later than noon of the Division's next working day, and shall submit written notification following the initial occurrence of the excess emissions by the end of the source's next reporting period. The notification shall address the criteria set forth above.

The Affirmative Defense Provision contained in this section shall not be available to claims for injunctive relief.

The Affirmative Defense Provision does not apply to failures to meet federally promulgated performance standards or emission limits, including, but not limited to, new source performance standards and national emission standards for hazardous air pollutants. The affirmative defense provision does not apply to state implementation plan (sip) limits or permit limits that have been set taking into account potential emissions during malfunctions, including, but not necessarily limited to, certain limits with 30-day or longer averaging times, limits that indicate they apply during malfunctions, and limits that indicate they apply at all times or without exception.

e. Circumvention Clause

A person shall not build, erect, install, or use any article, machine, equipment, condition, or any contrivance, the use of which, without resulting in a reduction in the total release of air pollutants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of this regulation. No person shall circumvent this regulation by using more openings than is considered normal practice by the industry or activity in question.

f. Compliance Certifications

For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in the Colorado State Implementation Plan, nothing in the Colorado State Implementation Plan shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. Evidence that has the effect of making any relevant standard or permit term more stringent shall not be credible for proving a violation of the standard or permit term.

When compliance or non-compliance is demonstrated by a test or procedure provided by permit or other applicable requirement, the owner or operator shall be presumed to be in compliance or non-compliance unless other relevant credible evidence overcomes that presumption.

g. Affirmative Defense Provision for Excess Emissions During Startup and Shutdown

An affirmative defense is provided to owners and operators for civil penalty actions for excess emissions during periods of startup and shutdown. To establish the affirmative defense and to be relieved of a civil penalty in any action to enforce an applicable requirement, the owner or operator of the facility must meet the notification requirements below in a timely manner and prove by a preponderance of the evidence that:

- (i) The periods of excess emissions that occurred during startup and shutdown were short and infrequent and could not have been prevented through careful planning and design;
- (ii) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation or maintenance;

- (iii) If the excess emissions were caused by a bypass (an intentional diversion of control equipment), then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- (iv) The frequency and duration of operation in startup and shutdown periods were minimized to the maximum extent practicable;
- (v) All possible steps were taken to minimize the impact of excess emissions on ambient air quality;
- (vi) All emissions monitoring systems were kept in operation (if at all possible);
- (vii) The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence; and,
- (viii) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions. This subparagraph is intended solely to be a factor in determining whether an affirmative defense is available to an owner or operator, and shall not constitute an additional applicable requirement.

The owner or operator of the facility experiencing excess emissions during startup and shutdown shall notify the Division verbally as soon as possible, but no later than two (2) hours after the start of the next working day, and shall submit written quarterly notification following the initial occurrence of the excess emissions. The notification shall address the criteria set forth above.

The Affirmative Defense Provision contained in this section shall not be available to claims for injunctive relief.

The Affirmative Defense Provision does not apply to State Implementation Plan provisions or other requirements that derive from new source performance standards or national emissions standards for hazardous air pollutants, or any other federally enforceable performance standard or emission limit with an averaging time greater than twenty-four hours. In addition, an affirmative defense cannot be used by a single source or small group of sources where the excess emissions have the potential to cause an exceedance of the ambient air quality standards or Prevention of Significant Deterioration (PSD) increments.

In making any determination whether a source established an affirmative defense, the Division shall consider the information within the notification required above and any other information the Division deems necessary, which may include, but is not limited to, physical inspection of the facility and review of documentation pertaining to the maintenance and operation of process and air pollution control equipment.

4. Compliance Requirements

Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.C.9., V.C.11. & 16.d. and § 25-7-122.1(2), C.R.S.

- a. The permittee must comply with all conditions of the Operating Permit. Any permit noncompliance relating to federally-enforceable terms or conditions constitutes a violation of the federal act, as well as the state act and Regulation No. 3. Any permit noncompliance relating to state-only terms or conditions constitutes a violation of the state act and Regulation No. 3, shall be enforceable pursuant to state law, and shall not be enforceable by citizens under § 304 of the federal act. Any such violation of the federal act, the state act or regulations implementing either statute is grounds for enforcement action, for permit termination, revocation and reissuance or modification or for denial of a permit renewal application.
- b. It shall not be a defense for a permittee in an enforcement action or a consideration in favor of a permittee in a permit termination, revocation or modification action or action denying a permit renewal application that it would

have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

- c. The permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of any request by the permittee for a permit modification, revocation and reissuance, or termination, or any notification of planned changes or anticipated noncompliance does not stay any permit condition, except as provided in §§ X. and XI. of Regulation No. 3, Part C.
- d. The permittee shall furnish to the Air Pollution Control Division, within a reasonable time as specified by the Division, any information that the Division may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Division copies of records required to be kept by the permittee, including information claimed to be confidential. Any information subject to a claim of confidentiality shall be specifically identified and submitted separately from information not subject to the claim.
- e. Any schedule for compliance for applicable requirements with which the source is not in compliance at the time of permit issuance shall be supplemental, and shall not sanction noncompliance with, the applicable requirements on which it is based.
- f. For any compliance schedule for applicable requirements with which the source is not in compliance at the time of permit issuance, the permittee shall submit, at least every 6 months unless a more frequent period is specified in the applicable requirement or by the Air Pollution Control Division, progress reports which contain the following:
 - (i) dates for achieving the activities, milestones, or compliance required in the schedule for compliance, and dates when such activities, milestones, or compliance were achieved; and
 - (ii) an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- g. The permittee shall not knowingly falsify, tamper with, or render inaccurate any monitoring device or method required to be maintained or followed under the terms and conditions of the Operating Permit.

5. Emergency Provisions

Regulation No. 3, 5 CCR 1001-5, Part C, § VII.

An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed the technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. "Emergency" does not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. An emergency constitutes an affirmative defense to an enforcement action brought for noncompliance with a technology-based emission limitation if the permittee demonstrates, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. an emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. the permitted facility was at the time being properly operated;

- c. during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- d. the permittee submitted oral notice of the emergency to the Air Pollution Control Division no later than noon of the next working day following the emergency, and followed by written notice within one month of the time when emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

This emergency provision is in addition to any emergency or malfunction provision contained in any applicable requirement.

6. Emission Standards for Asbestos

Regulation No. 8, 5 CCR 1001-10, Part B

The permittee shall not conduct any asbestos abatement activities except in accordance with the provisions of Regulation No. 8, Part B, "emission standards for asbestos."

7. Emissions Trading, Marketable Permits, Economic Incentives

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.13.

No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are specifically provided for in the permit.

8. Fee Payment

C.R.S. §§ 25-7-114.1(6) and 25-7-114.7

- a. The permittee shall pay an annual emissions fee in accordance with the provisions of C.R.S. § 25-7-114.7. A 1% per month late payment fee shall be assessed against any invoice amounts not paid in full on the 91st day after the date of invoice, unless a permittee has filed a timely protest to the invoice amount.
- b. The permittee shall pay a permit processing fee in accordance with the provisions of C.R.S. § 25-7-114.7. If the Division estimates that processing of the permit will take more than 30 hours, it will notify the permittee of its estimate of what the actual charges may be prior to commencing any work exceeding the 30 hour limit.
- c. The permittee shall pay an APEN fee in accordance with the provisions of C.R.S. § 25-7-114.1(6) for each APEN or revised APEN filed.

9. Fugitive Particulate Emissions

Regulation No. 1, 5 CCR 1001-3, § III.D.1.

The permittee shall employ such control measures and operating procedures as are necessary to minimize fugitive particulate emissions into the atmosphere, in accordance with the provisions of Regulation No. 1, § III.D.1.

10. Inspection and Entry

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.16.b.

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Air Pollution Control Division, or any authorized representative, to perform the following:

- a. enter upon the permittee's premises where an Operating Permit source is located, or emissions-related activity is conducted, or where records must be kept under the terms of the permit;
- b. have access to, and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- c. inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the Operating Permit;
- d. sample or monitor at reasonable times, for the purposes of assuring compliance with the Operating Permit or applicable requirements, any substances or parameters.

11. Minor Permit Modifications

Regulation No. 3, 5 CCR 1001-5, Part C, §§ X. & XI.

The permittee shall submit an application for a minor permit modification before making the change requested in the application. The permit shield shall not extend to minor permit modifications.

12. New Source Review

Regulation No. 3, 5 CCR 1001-5, Part B

The permittee shall not commence construction or modification of a source required to be reviewed under the New Source Review provisions of Regulation No. 3, Part B, without first receiving a construction permit.

13. No Property Rights Conveyed

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.11.d.

This permit does not convey any property rights of any sort, or any exclusive privilege.

14. Odor

Regulation No. 2, 5 CCR 1001-4, Part A

As a matter of state law only, the permittee shall comply with the provisions of Regulation No. 2 concerning odorous emissions.

15. Off-Permit Changes to the Source

Regulation No. 3, 5 CCR 1001-5, Part C, § XII.B.

The permittee shall record any off-permit change to the source that causes the emissions of a regulated pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from the change, including any other data necessary to show compliance with applicable ambient air quality standards. The permittee shall provide contemporaneous notification to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit . The permit shield shall not apply to any off-permit change.

16. Opacity

Operating Permit No. 96OPMO168 Issued: June 1, 2002

Regulation No. 1, 5 CCR 1001-3, §§ I., II.

The permittee shall comply with the opacity emissions limitation set forth in Regulation No. 1, §§ I.-II.

17. Open Burning

Regulation No. 9, 5 CCR 1001-11

The permittee shall obtain a permit from the Division for any regulated open burning activities in accordance with provisions of Regulation No. 9.

18. Ozone Depleting Compounds

Regulation No. 15, 5 CCR 1001-19

The permittee shall comply with the provisions of Regulation No. 15 concerning emissions of ozone depleting compounds. Sections I., II.C., II.D., III. IV., and V. of Regulation No. 15 shall be enforced as a matter of state law only.

19. Permit Expiration and Renewal

Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.B.6., IV.C., V.C.2.

- a. The permit term shall be five (5) years. The permit shall expire at the end of its term. Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted.
- b. Applications for renewal shall be submitted at least twelve months, but not more than 18 months, prior to the expiration of the Operating Permit. An application for permit renewal may address only those portions of the permit that require revision, supplementing, or deletion, incorporating the remaining permit terms by reference from the previous permit. A copy of any materials incorporated by reference must be included with the application.

20. Portable Sources

Regulation No. 3, 5 CCR 1001-5, Part C, § II.D.

Portable Source permittees shall notify the Air Pollution Control Division at least 10 days in advance of each change in location.

21. Prompt Deviation Reporting

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.7.b.

The permittee shall promptly report any deviation from permit requirements, including those attributable to malfunction conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken.

"Prompt" is defined as follows:

- a. Any definition of "prompt" or a specific timeframe for reporting deviations provided in an underlying applicable requirement as identified in this permit; or
- b. Where the underlying applicable requirement fails to address the time frame for reporting deviations, reports of deviations will be submitted based on the following schedule:

- i. For emissions of a hazardous air pollutant or a toxic air pollutant (as identified in the applicable regulation) that continue for more than an hour in excess of permit requirements, the report shall be made within 24 hours of the occurrence;
- ii. For emissions of any regulated air pollutant, excluding a hazardous air pollutant or a toxic air pollutant that continue for more than two hours in excess of permit requirements, the report shall be made within 48 hours; and
- iii. For all other deviations from permit requirements, the report shall be submitted every six (6) months, except as otherwise specified by the Division in the permit in accordance with paragraph 22.d. below.
- c. If any of the conditions in paragraphs b.i or b.ii above are met, the source shall notify the Division by telephone (303-692-3155) or facsimile (303-782-0278) based on the timetables listed above. [Explanatory note: Notification by telephone or facsimile must specify that this notification is a deviation report for an Operating Permit.] A written notice, certified consistent with General Condition 2.a. above (Certification Requirements), shall be submitted within 10 working days of the occurrence. All deviations reported under this section shall also be identified in the 6-month report required above.

"Prompt reporting" does not constitute an exception to the requirements of "Emergency Provisions" for the purpose of avoiding enforcement actions.

22. Record Keeping and Reporting Requirements

Regulation No. 3, 5 CCR 1001-5, Part A, § II.; Part C, §§ V.C.6., V.C.7.

- a. Unless otherwise provided in the source specific conditions of this Operating Permit, the permittee shall maintain compliance monitoring records that include the following information:
 - (i) date, place as defined in the Operating Permit, and time of sampling or measurements;
 - (ii) date(s) on which analyses were performed;
 - (iii) the company or entity that performed the analysis;
 - (iv) the analytical techniques or methods used;
 - (v) the results of such analysis; and
 - (vi) the operating conditions at the time of sampling or measurement.
- b. The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report or application. Support information, for this purpose, includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Operating Permit. With prior approval of the Air Pollution Control Division, the permittee may maintain any of the above records in a computerized form.
- c. Permittees must retain records of all required monitoring data and support information for the most recent twelve (12) month period, as well as compliance certifications for the past five (5) years on-site at all times. A permittee

Operating Permit No. 96OPMO168 Issued: June 1, 2002

- shall make available for the Air Pollution Control Division's review all other records of required monitoring data and support information required to be retained by the permittee upon 48 hours advance notice by the Division.
- d. The permittee shall submit to the Air Pollution Control Division all reports of any required monitoring at least every six (6) months, unless an applicable requirement, the compliance assurance monitoring rule, or the Division requires submission on a more frequent basis. All instances of deviations from any permit requirements must be clearly identified in such reports.
- e. The permittee shall file an Air Pollutant Emissions Notice ("APEN") prior to constructing, modifying, or altering any facility, process, activity which constitutes a stationary source from which air pollutants are or are to be emitted, unless such source is exempt from the APEN filing requirements of Regulation No. 3, Part A, § II.D. A revised APEN shall be filed annually whenever a significant change in emissions, as defined in Regulation No. 3, Part A, § II.C.2., occurs; whenever there is a change in owner or operator of any facility, process, or activity; whenever new control equipment is installed; whenever a different type of control equipment replaces an existing type of control equipment; whenever a permit limitation must be modified; or before the APEN expires. An APEN is valid for a period of five years. The five-year period recommences when a revised APEN is received by the Air Pollution Control Division. Revised APENs shall be submitted no later than 30 days before the five-year term expires. Permittees submitting revised APENs to inform the Division of a change in actual emission rates must do so by April 30 of the following year. Where a permit revision is required, the revised APEN must be filed along with a request for permit revision. APENs for changes in control equipment must be submitted before the change occurs. Annual fees are based on the most recent APEN on file with the Division.

23. Reopenings for Cause

Regulation No. 3, 5 CCR 1001-5, Part C, § XIII.

- a. The Air Pollution Control Division shall reopen, revise, and reissue Operating Permits; permit reopenings and reissuance shall be processed using the procedures set forth in Regulation No. 3, Part C, § III., except that proceedings to reopen and reissue permits affect only those parts of the permit for which cause to reopen exists.
- b. The Division shall reopen a permit whenever additional applicable requirements become applicable to a major source with a remaining permit term of three or more years, unless the effective date of the requirements is later than the date on which the permit expires, or unless a general permit is obtained to address the new requirements; whenever additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program; whenever the Division determines the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or whenever the Division determines that the permit must be revised or revoked to assure compliance with an applicable requirement.
- c. The Division shall provide 30 days' advance notice to the permittee of its intent to reopen the permit, except that a shorter notice may be provided in the case of an emergency.
- d. The permit shield shall extend to those parts of the permit that have been changed pursuant to the reopening and reissuance procedure.

24. Section 502(b)(10) Changes

Operating Permit No. 96OPMO168 Issued: June 1, 2002

Regulation No. 3, 5 CCR 1001-5, Part C, § XII.A.

The permittee shall provide a minimum 7-day advance notification to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit. The permittee shall attach a copy of each such notice given to its Operating Permit.

25. Severability Clause

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.10.

In the event of a challenge to any portion of the permit, all emissions limits, specific and general conditions, monitoring, record keeping and reporting requirements of the permit, except those being challenged, remain valid and enforceable.

26. Significant Permit Modifications

Regulation No. 3, 5 CCR 1001-5, Part C, §III.B.2.

The permittee shall not make a significant modification required to be reviewed under Regulation No. 3, Part B ("Construction Permit" requirements) without first receiving a construction permit. The permittee shall submit a complete Operating Permit application or application for an Operating Permit revision for any new or modified source within twelve months of commencing operation, to the address listed in Item 1 in Appendix D of this permit. If the permittee chooses to use the "Combined Construction/Operating Permit" application procedures of Regulation No. 3, Part C, then the Operating Permit must be received prior to commencing construction of the new or modified source.

27. Special Provisions Concerning the Acid Rain Program

Regulation No. 3, 5 CCR 1001-5, Part C, §§ V.C.1.b. & 8

- a. Where an applicable requirement of the federal act is more stringent than an applicable requirement of regulations promulgated under Title IV of the federal act, 40 Code of Federal Regulations (CFR) Part 72, both provisions shall be incorporated into the permit and shall be federally enforceable.
- b. Emissions exceeding any allowances that the source lawfully holds under Title IV of the federal act or the regulations promulgated thereunder, 40 CFR Part 72, are expressly prohibited.

28. Transfer or Assignment of Ownership

Regulation No. 3, 5 CCR 1001-5, Part C, § II.C.

No transfer or assignment of ownership of the Operating Permit source will be effective unless the prospective owner or operator applies to the Air Pollution Control Division on Division-supplied Administrative Permit Amendment forms, for reissuance of the existing Operating Permit. No administrative permit shall be complete until a written agreement containing a specific date for transfer of permit, responsibility, coverage, and liability between the permittee and the prospective owner or operator has been submitted to the Division.

29. Volatile Organic Compounds

Regulation No. 7, 5 CCR 1001-9, §§ III & V.

a. For sources located in an ozone non-attainment area or the Denver Metro Attainment Maintenance Area, all storage tank gauging devices, anti-rotation devices, accesses, seals, hatches, roof drainage systems, support structures, and pressure relief valves shall be maintained and operated to prevent detectable vapor loss except when opened,

Issued: June 1, 2002

actuated, or used for necessary and proper activities (e.g. maintenance). Such opening, actuation, or use shall be limited so as to minimize vapor loss.

Detectable vapor loss shall be determined visually, by touch, by presence of odor, or using a portable hydrocarbon analyzer. When an analyzer is used, detectable vapor loss means a VOC concentration exceeding 10,000 ppm. Testing shall be conducted as in Regulation No. 7, Section VIII.C.3.

Except when otherwise provided by Regulation No. 7, all volatile organic compounds, excluding petroleum liquids, transferred to any tank, container, or vehicle compartment with a capacity exceeding 212 liters (56 gallons), shall be transferred using submerged or bottom filling equipment. For top loading, the fill tube shall reach within six inches of the bottom of the tank compartment. For bottom-fill operations, the inlet shall be flush with the tank bottom.

- b. The permittee shall not dispose of volatile organic compounds by evaporation or spillage unless Reasonably Available Control Technology (RACT) is utilized.
- c. No owner or operator of a bulk gasoline terminal, bulk gasoline plant, or gasoline dispensing facility as defined in Colorado Regulation No. 7, Section VI, shall permit gasoline to be intentionally spilled, discarded in sewers, stored in open containers, or disposed of in any other manner that would result in evaporation.

30. Wood Stoves and Wood burning Appliances

Regulation No. 4, 5 CCR 1001-6

The permittee shall comply with the provisions of Regulation No. 4 concerning the advertisement, sale, installation, and use of wood stoves and wood burning appliances.

OPERATING PERMIT APPENDICES

- A INSPECTION INFORMATION
- **B REPORTING REQUIREMENTS AND DEFINITIONS**
- C COMPLIANCE CERTIFICATION REPORT FORMAT
- D NOTIFICATION ADDRESSES
- E PERMIT ACRONYMS & ABBREVIATIONS
- F PERMIT MODIFICATIONS
- G COAL SAMPLING PLAN ELEMENTS
- H BAGHOUSE INTERNAL INSPECTION PROCEDURES

DISCLAIMER:

None of the information found in these Appendices shall be considered to be State or Federally enforceable, unless otherwise stated in this permit, and is presented to assist the source, permitting authority, inspectors, and citizens.

Operating Permit No. 96OPMO168 Issued: June 1, 2002

APPENDIX A - Inspection Information

Directions to Plant:

The facility is located between Nucla and Naturita, CO, on County Road DD, adjacent to the San Miguel River (30739 DD 30 Road).

Safety Equipment Required:

Eye Protection Hard Hat Safety Shoes Hearing Protection

Facility Plot Plan:

Figure 1 (following page) shows the modified plot plan submitted on August 1, 1995 reflecting the removal of the two fuel oil tanks.

List of Insignificant Activities:

The following list of insignificant activities was provided by the source to assist in the understanding of the facility layout. Since there is no requirement to update such a list, activities may have changed since the last filing.

Disturbance of surface areas for purposes of land development, which do not exceed 25 contiguous acres and which do not exceed six months in duration. (This does not include mining operations or disturbance of contaminated soil.)

Each individual piece of fuel burning equipment, other than smokehouse generators and internal combustion engines, which uses gaseous fuel, and which has a design rate less than or equal to 5 million Btu pre hour.

Chemical storage tanks or containers that hold less than 500 gallons, and which have a daily throughput less than 25 gallons.

Landscaping and site housekeeping devices equal to or less than 10 HP in size (lawnmowers, trimmers, snow blowers, etc.).

Operating Permit No. 96OPMO168 Issued: June 1, 2002

Chemical storage areas where chemicals are stored in closed containers, and where total storage capacity does not exceed 5000 gallons. This exemption applies solely to storage of such chemicals. This exemption does not apply to transfer of chemicals from, to, or between such containers.

Storage of butane, propane, or liquefied petroleum gas in a vessel with a capacity of less than 60,000 gallons, provided the requirements of Regulation No. 7, Section IV are met, where applicable.

Storage tanks of capacity < 40,000 gallons of lubricating oils.

Fuel storage and dispensing equipment in ozone attainment areas operated solely for company-owned vehicles where the daily fuel throughput is no more than 400 gallons per day, averaged over a 30 day period.

Storage tanks meeting all of the following criteria:

- (i) annual throughput is less than 40,000 gallons; and
- (ii) the liquid is one of the following:
 - (A) diesel fuels 1-D, 2-D or 4-D;
 - (B) fuel oils #1 through #6;
 - (C) gas turbine fuels 1-GT through 4-GT;
 - (D) an oil/water mixture with a vapor pressure lower than that of diesel fuel (Reid vapor pressure of 0.025 PSIA).

Each individual piece of fuel burning equipment which uses gaseous fuel, and which has a design rate less than or equal to 10 million Btu per hour, and which is solely for heating buildings for personal comfort.

Stationary Internal Combustion Engines which:

- (i) power portable drilling rigs; or
- (ii) are emergency power generators which have a rated horsepower of less than 260 or; operate no more than 250 hours per year and have a rated horsepower of less than 737; or operate no more than 100 hours per year and have a rated horsepower of less than 1840; or
- (iii) have actual emissions less than five tons per year or rated horsepower of less than 50.

Boiler water/steam discharges (including condensate storage, boiler blowdown, deaerator and heater vents)

Turbine lube oil system venting

6,000 gallon H₂SO₄ tank

7,500 gallon waste (used) oil tank, 10,000 gallon/yr use rate

Issued: June 1, 2002

Four (4) portable diesel space heaters, 150,000 Btu/hr each

One parts washer - 200 gallon/year use rate

Limestone Pulverizer Mill Air Heater

2.5 mmBtu/hr Propane Vaporizer

2 mmBtu/hr Propane Vaporizer

300 gallon gas tank

Two (2) 500 gallon dyed diesel tanks

One (1) 200 gallon tank of sodium tolytriazole and various quantities of drums containing aqueous solutions of pyrophosphate

2,000 gallon tank aqueous acrylate polymer and organo phosphorous

Two (2) 30,000 gallon propane tanks

5,000 gallon NaOH tank

Off-road equipment, including, but not limited to:

diesel powered portable welders kerosene powered steam cleaners <10 hp gas powered generator mobile cranes golf carts (gasoline powered) skid loaders portable air compressors forklifts two front end loaders

Boiler Chemical Feed Area and Chemical Storage Area (Thirty 55 gallon drums) Maintenance Shed Exhausters for maintenance activities Two (2) 7,500 turbine lube oil tanks

Safety Relief Valves

Steam Vents

HVAC Vent (Tripper deck area)

Operating Permit No. 96OPMO168

Blowdown Tank Vents

Dearator Vents

Economizer Vents

Auxiliary Steam Safety Relief Valve

Electromatic Relief Valve

Two (2) 1 ton chlorine tanks

Drain - Steam From Building Heating System

Bldg Heating Safety Vent

Safety Pressure Relief on Limestone Treatment System

Safety Relief Valve on Limestone Injection (Limestone Powder)

Steam Seal HP Relief

Steam Seal HP Relief Rupture Disk

CO₂ Vents - Turbine Gen. Purge

Exhaust from Gland Condenser Exhaustor

Abandoned (Nugent) Exhauster Vent

Aux. Boiler Safety Relief Valve

Abandoned Steam (multiple)

Condenser Evac. Vents

HVAC Exhaust Off Tripper Deck

Gland Exhausts

12 Ton CO₂ Tank

Building Heating System Vents

Chemical Laboratory

Gritblasting and Sandblasting Activities

Street and Parking Lot Striping

Aerosol Can Usage

Road and Lot Paving

Roofing Activities

Painting

Issued: June 1, 2002

APPENDIX B Reporting Requirements and Definitions

no codes ver 2/20/07

Please note that, pursuant to 113(c)(2) of the federal Clean Air Act, any person who knowingly:

- (A) makes any false material statement, representation, or certification in, or omits material information from, or knowingly alters, conceals, or fails to file or maintain any notice, application, record, report, plan, or other document required pursuant to the Act to be either filed or maintained (whether with respect to the requirements imposed by the Administrator or by a State);
- (B) fails to notify or report as required under the Act; or
- (C) falsifies, tampers with, renders inaccurate, or fails to install any monitoring device or method required to be maintained or followed under the Act shall, upon conviction, be punished by a fine pursuant to title 18 of the United States Code, or by imprisonment for not more than 2 years, or both. If a conviction of any person under this paragraph is for a violation committed after a first conviction of such person under this paragraph, the maximum punishment shall be doubled with respect to both the fine and imprisonment.

The permittee must comply with all conditions of this operating permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

The Part 70 Operating Permit program requires three types of reports to be filed for all permits. All required reports must be certified by a responsible official.

Report #1: Monitoring Deviation Report (due at least every six months)

For purposes of this operating permit, the Division is requiring that the monitoring reports are due every six months unless otherwise noted in the permit. All instances of deviations from permit monitoring requirements must be clearly identified in such reports.

For purposes of this operating permit, monitoring means any condition determined by observation, by data from any monitoring protocol, or by any other monitoring which is required by the permit as well as the recordkeeping associated with that monitoring. This would include, for example, fuel use or process rate monitoring, fuel analyses, and operational or control device parameter monitoring.

Operating Permit No. 96OPMO168 Issued: June 1, 2002

Report #2: Permit Deviation Report (must be reported "promptly")

In addition to the monitoring requirements set forth in the permits as discussed above, each and every requirement of the permit is subject to deviation reporting. The reports must address deviations from permit requirements, including those attributable to upset conditions and malfunctions as defined in this Appendix, the probable cause of such deviations, and any corrective actions or preventive measures taken. All deviations from any term or condition of the permit are required to be summarized or referenced in the annual compliance certification.

For purposes of this operating permit, "malfunction" shall refer to both emergency conditions and malfunctions. Additional discussion on these conditions is provided later in this Appendix.

For purposes of this operating permit, the Division is requiring that the permit deviation reports are due as set forth in General Condition 21. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. For example, quarterly Excess Emission Reports required by an NSPS or Regulation No. 1, Section IV.

In addition to the monitoring deviations discussed above, included in the meaning of deviation for the purposes of this operating permit are any of the following:

- (1) A situation where emissions exceed an emission limitation or standard contained in the permit;
- (2) A situation where process or control device parameter values demonstrate that an emission limitation or standard contained in the permit has not been met;
- (3) A situation in which observations or data collected demonstrates noncompliance with an emission limitation or standard or any work practice or operating condition required by the permit; or,
- (4) A situation in which an excursion or exceedance as defined in 40CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred. (only if the emission point is subject to CAM)

For reporting purposes, the Division has combined the Monitoring Deviation Report with the Permit Deviation Report.

Report #3: Compliance Certification (annually, as defined in the permit)

Submission of compliance certifications with terms and conditions in the permit, including emission limitations, standards, or work practices, is required not less than annually.

Compliance Certifications are intended to state the compliance status of each requirement of the permit over the certification period. They must be based, at a minimum, on the testing and monitoring methods specified in the permit that were conducted during the relevant time period. In addition, if the owner or operator knows of other

DPMO168 Issued: June 1, 2002

material information (i.e. information beyond required monitoring that has been specifically assessed in relation to how the information potentially affects compliance status), that information must be identified and addressed in the compliance certification. The compliance certification must include the following:

- The identification of each term or condition of the permit that is the basis of the certification;
- Whether or not the method(s) used by the owner or operator for determining the compliance status with each permit term and condition during the certification period was the method(s) specified in the permit. Such methods and other means shall include, at a minimum, the methods and means required in the permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Clean Air Act, which prohibits knowingly making a false certification or omitting material information;
- The status of compliance with the terms and conditions of the permit, and whether compliance was continuous or intermittent. The certification shall identify each deviation and take it into account in the compliance certification. Note that not all deviations are considered violations.¹
- Such other facts as the Division may require, consistent with the applicable requirements to which the source is subject, to determine the compliance status of the source.

The Certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred. (only for emission points subject to CAM)

Note the requirement that the certification shall identify each deviation and take it into account in the compliance certification. Previously submitted deviation reports, including the deviation report submitted at the time of the annual certification, may be referenced in the compliance certification.

_

¹ For example, given the various emissions limitations and monitoring requirements to which a source may be subject, a deviation from one requirement may not be a deviation under another requirement which recognizes an exception and/or special circumstances relating to that same event.

Startup, Shutdown, Malfunctions and Emergencies

Understanding the application of Startup, Shutdown, Malfunctions and Emergency Provisions, is very important in both the deviation reports and the annual compliance certifications.

Startup, Shutdown, and Malfunctions

Please note that exceedances of some New Source Performance Standards (NSPS) and Maximum Achievable Control Technology (MACT) standards that occur during Startup, Shutdown or Malfunctions may not be considered to be non-compliance since emission limits or standards often do not apply unless specifically stated in the NSPS. Such exceedances must, however, be reported as excess emissions per the NSPS/MACT rules and would still be noted in the deviation report. In regard to compliance certifications, the permittee should be confident of the information related to those deviations when making compliance determinations since they are subject to Division review. The concepts of Startup, Shutdown and Malfunctions also exist for Best Available Control Technology (BACT) sources, but are not applied in the same fashion as for NSPS and MACT sources.

Emergency Provisions

Under the Emergency provisions of Part 70, certain operational conditions may act as an affirmative defense against enforcement action if they are properly reported.

DEFINITIONS

Malfunction (NSPS) means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Malfunction (SIP) means any sudden and unavoidable failure of air pollution control equipment or process equipment or unintended failure of a process to operate in a normal or usual manner. Failures that are primarily caused by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

Emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

Operating Permit No. 96OPMO168 Issued: June 1, 2002

APPENDIX B: Monitoring and Permit Deviation Report - Part I

- 1. Following is the **required** format for the Monitoring and Permit Deviation report to be submitted to the Division as set forth in General Condition 21. The Table below must be completed for all equipment or processes for which specific Operating Permit terms exist.
- Part II of this Appendix B shows the format and information the Division will require for describing 2. periods of monitoring and permit deviations, or malfunction or emergency conditions as indicated in the Table below. One Part II Form must be completed for each Deviation. Previously submitted reports (e.g. EER's or malfunctions) may be referenced and the form need not be filled out in its entirety.

FACILITY NAME: Tri-State Generation & Trar	nsmission - Nucla Station
OPERATING PERMIT NO: 960PM0168	
REPORTING PERIOD:	(see first page of the permit for specific reporting period and
dates)	

Operating		Deviation During P		Condit	ion/Emergency ion Reported ng Period?
Operating Permit Unit ID	Unit Description	YES	NO	YES	NO
B004	1,112 mmBtu/hr Pyropower # 1362 - Coal				
B004	1,112 mmBtu/hr Pyropower #1362 - Propane				
B005	25.1 mmBtu/hr Cleaver Brooks CB200-600 #1-70825				
P101	F101 - On-Site Coal Haulage				
P102	F102 - Main and Surge Coal Stockpiles				
P103	F103 - Coal Haulage from Surge Stockpile				
P104	F104 - Coal Transfer from Truck to Hopper				
P105	Primary Crusher, Rotary Breaker, Conveyors, and Main Stockpile Loadout				
P106	S106 - Final Crushers, Conveyors, Silos				
P201	S201 - Limestone Receiving Hoppers, Crushers, Conveyors, Transfers				

Operating Permit No. 96OPMO168 Issued: June 1, 2002

Operating		Deviatio During l		Condition	on/Emergency on Reported g Period?
Permit Unit ID	Unit Description	YES	NO	YES	NO
P202	S202 - 900 Ton Limestone Storage Silos				
P203	S203 - Limestone Pulverizer System				
P204	S004 - Two (2) 135 Ton Limestone Storage Silos				
P205	F205 - Limestone Hauling, Stockpiling and Reclamation				
P301a	S301a(1-3) - Pneumatic Conveyance of Flyash				
P301b	S301b(1-2) - Pneumatic Conveyance of Bottom Ash				
P301c	S301a4 - 720 Ton Flyash Silo				
P301d	S301b3 - 200 Ton Bottom Ash Silo				
P302a	S301a4 - Truck Loading of Fly Ash - Dry				
P302b	S301b3 - Truck Loading of Bottom Ash - Dry				
P302c	F302c - Truck Loading of Fly Ash - Rotary Unloader				
P302d	F302d - Truck Loading of Bottom Ash - Rotary Unloader				
P303a	F303a - Ash Hauling @ Nucla Station & Ash Hauling @ Disposal Site				
P303b	F303b - Landfill Operations & Wind Erosion				
P401	F401 - Cooling Tower Serving Turbines 1,2,3				
P402	F402 - Cooling Tower Serving Turbine 4				
General Conditions					

Operating		Deviation During P		Condit	ion/Emergency ion Reported ng Period?
Permit Unit ID	Unit Description	YES	NO	YES	NO
Insignificant Activities					

¹ See previous discussion regarding what is considered to be a deviation. Determination of whether or not a deviation has occurred shall be based on a reasonable inquiry using readily available information.

Issued: June 1, 2002

APPENDIX B: Monitoring and Permit Deviation Report - Part II

FACILITY NAME: Tri-State Generation & Transport of the Transport of the Permit NO: 960PM0168 REPORTING PERIOD:	mission Assoc., Inc.	- Nucla Station	
Is the deviation being claimed as an:	Emergency	Malfunction	N/A
(For NSPS/MACT) Did the deviation occur during:	Startup	Shutdown	Malfunction
	Normal Operation		
OPERATING PERMIT UNIT IDENTIFICATION:			
Operating Permit Condition Number Citation			
Explanation of Period of Deviation			
Duration (start/stop date & time)			
Action Taken to Correct the Problem			
Measures Taken to Prevent a Reoccurrence of the Pr	<u>roblem</u>		
Dates of Malfunctions/Emergencies Reported (if app	olicable)		
Deviation Code (for Division Use Only)	E ON THE NEXT I	PACE	
SEL EARWII LI		AGE	

EXAMPLE

FACILITY NAME: Acme Corp. OPERATING PERMIT NO: 96OPZZXXX REPORTING PERIOD: 1/1/96 - 6/30/96				
Is the deviation being claimed as an:	Emergency	Malfunction _	XX	N/A
(For NSPS/MACT) Did the deviation occur during:	Startup Normal Operation		Malfunc	tion
OPERATING PERMIT UNIT IDENTIFICATION:				
Asphalt Plant with a Scrubber for Particulate Control	l - Unit XXX			
Operating Permit Condition Number Citation				
Section II, Condition 3.1 - Opacity Limitation				
Explanation of Period of Deviation				
Slurry Line Feed Plugged				
<u>Duration</u>				
START- 1730 4/10/06 END- 1800 4/10/06				
Action Taken to Correct the Problem				
Line Blown Out				
Measures Taken to Prevent Reoccurrence of the Pro	<u>blem</u>			
Replaced Line Filter				
Dates of Malfunction/Emergencies Reported (if app	<u>licable)</u>			
5/30/06 to A. Einstein, APCD Deviation Code (for Division Use Only)				

APPENDIX B: Monitoring and Permit Deviation Report - Part III

REPORT CERTIFICATION

SOURCE NAME: Tri-State Generation	on & Transmission Assoc., Inc	- Nucla Station
FACILITY IDENTIFICATION NUM	IBER: 0850001	
PERMIT NUMBER: 960PMO168		
REPORTING PERIOD:	(see first page of the perr	mit for specific reporting period and dates)
	3, Part A, Section I.B.38. Th	st be certified by a responsible official as is signed certification document must be
STATEMENT OF COMPLETENE	SS	
	· ·	and, based on information and belief information contained in this submittal
1-501(6), C.R.S., makes any false m	aterial statement, representat	knowingly, as defined in Sub-Section 18- tion, or certification in this document is with the provisions of Sub-Section 25-7
Printed or Typed Name	2	Title
Signature		Date Signed
Note: Deviation reports shall be su permit. No copies need be sent to the		ne address given in Appendix D of this
Operating Permit No. 96OPMO168		Issued: June 1, 2002

APPENDIX C Format for Annual Compliance Certification Reports

Required Format for Annual Compliance Certification Report

Following is the format for the Compliance Certification report to be submitted to the Division and the U.S. EPA annually based on the effective date of the permit. The Table below must be completed for all equipment or processes for which specific Operating Permit terms exist.

FACILITY NAME: Tri-State Generation & Transmission Assoc., Inc. - Nucla Station

OPERATING PERMIT NO: 960PM0168 REPORTING PERIOD:

I. Facility Status

During the entire reporting period, this source was in compliance with ALL terms and cond	itions contained
in the Permit, each term and condition of which is identified and included by this reference.	The method(s)
used to determine compliance is/are the method(s) specified in the Permit.	

With the possible exception of the deviations identified in the table below, this source was in compliance with all terms and conditions contained in the Permit, each term and condition of which is identified and included by this reference, during the entire reporting period. The method used to determine compliance for each term and condition is the method specified in the Permit, unless otherwise indicated and described in the deviation report(s). Note that not all deviations are considered violations.

Operating Permit Unit ID	Unit Description	Deviations Reported ¹			ng Method ermit? ²	Contin	mpliance nuous or nittent? ³
		Previous	Current	YES	NO	Continuous	Intermittent
B004	1,112 mmBtu/hr CFB – Coal						
B004	1,112 mmBtu/hr CFB – Propane						
B005	25.1 mmBtu/hr Boiler						
P101	F101 - On-Site Coal Haulage						
P102	F102 – Main and Surge Coal Stockpiles						
P103	F103 - Coal Haulage from Surge Stockpile						
P104	F104 - Coal Transfer						

Operating Permit No. 96OPMO168

Operating Permit Unit ID	Unit Description		Deviations Reported ¹	Monitorir per Pe	ng Method ermit? ²	Contin	ompliance nuous or nittent? ³
		Previous	Current	YES	NO	Continuous	Intermittent
	from Truck to Hopper						
P105	Primary Crusher, Rotary Breaker, Conveyors, and Main Stockpile Loadout						
P106	S106 - Final Crushers, Conveyors, Silos						
P201	S201 - Limestone Receiving Hoppers, Crushers, Conveyors, Transfers						
P202	S201 - 900 Ton Limestone Silo						
P203	S203 - Limestone Pulverizer System						
P204	S004 - Two (2) 135 Ton Limestone Storage Silos						
P205	F205 - Limestone Hauling, Stockpiling, and Reclamation						
P301a	S301a(1-3) - Pneumatic Conveyance of Flyash						
P301b	S301b(1-2) - Pneumatic Conveyance of Bottom Ash						
P301c	S301a4 - 720 Ton Flyash Silo						
P301d	S301b3 - 200 Ton Bottom Ash Silo						
P302a	S301a4 - Truck Loading of Fly Ash – Dry						
P302b	S301b3 - Truck Loading of Bottom Ash - Dry						
P302c	F302c - Truck Loading of Fly Ash - Rotary Unloader						
P302d	F302d - Truck Loading of Bottom						

Operating Permit Unit ID	Unit Description		Deviations Reported ¹	Monitorii per Pe	ng Method ermit? ²	Contin	mpliance auous or hittent? ³
		Previous	Current	YES	NO	Continuous	Intermittent
	Ash - Rotary Unloader						
P303a	F303a - Ash Hauling @ Nucla Station & Ash Hauling @ Disposal Site						
P303b	F303b - Landfill Operations & Wind Erosion						
P401	F401 - Cooling Tower Serving Turbines 1,2,3						
P402	F402 - Cooling Tower Serving Turbine 4						
General Conditions							
Insignificant Activities ⁴		_				_	

¹ If deviations were noted in a previous deviation report, put an "X" under "previous". If deviations were noted in the current deviation report (i.e. for the last six months of the annual reporting period), put an "X" under "current". Mark both columns if both apply.

NOTE:

The Periodic Monitoring requirements of the Operating Permit program rule are intended to provide assurance that even in the absence of a continuous system of monitoring the Title V source can demonstrate whether it has operated in continuous compliance for the duration of the reporting period. Therefore, if a source 1) conducts all of the monitoring and recordkeeping required in its permit, even if such activities are done periodically and not continuously, and if 2) such monitoring and recordkeeping does not indicate non-compliance, and if 3) the Responsible Official is not aware of any credible evidence that indicates non-compliance, then the Responsible Official can certify that the emission point(s) in question were in continuous compliance during the applicable time period.

Operating Permit No. 96OPMO168 Issued: June 1, 2002

² Note whether the method(s) used to determine the compliance status with each term and condition was the method(s) specified in the permit. If it was not, mark "no" and attach additional information/explanation.

³ Note whether the compliance status with of each term and condition provided was continuous or intermittent. "Intermittent Compliance" can mean either that noncompliance has occurred or that the owner or operator has data sufficient to certify compliance only on an intermittent basis. Certification of intermittent compliance therefore does not necessarily mean that any noncompliance has occurred.

⁴ Compliance status for these sources shall be based on a reasonable inquiry using readily available information.

II.	Statu	s for Accidental Release Preventio	n Program:						
	A.	This facility is subjected Release Prevention Program (Se					of the A	Accide	ental
	B.	If subject: The facilityrequirements of section 112(r).	is	is not	in	compliance	with	all	the
III.	Certi	1. A Risk Management Pla appropriate authority and fication	-						the
define	ed in C	tion for the Title V Semi-Annual Colorado Regulation No. 3, Part A th the documents being submitted.	-			•			
		ewed this certification in its en inquiry, I certify that the statem	•						
Pleas C.R.S	e note S., mak	d complete. that the Colorado Statutes state tes any false material statement, or and may be punished in accor-	that any pers	son who know n, or certifica	ingly,	as defined i this docum	in § 18- ent is g	-1-501	1(6),
Pleas C.R.S	e note S., mak	that the Colorado Statutes state tes any false material statement,	that any pers	son who know n, or certifica	ingly,	as defined i this docum	in § 18- ent is g	-1-501	1(6),
Pleas C.R.S	e note S., mak	that the Colorado Statutes state tes any false material statement, or and may be punished in accord	that any pers	son who know n, or certifica	ingly,	as defined in this docum 7 122.1, C.R	in § 18- ent is g	-1-501	1(6),
Pleas C.R.S misde	e note S., mak emeand	that the Colorado Statutes state tes any false material statement, or and may be punished in accordance. Printed or Typed Name	that any pers representation dance with the	son who known, or certificate provisions o	ringly, tion in f § 25-	as defined in this docume 7 122.1, C.R. Titl	in § 18- ent is g s.S.	-1-50 guilty	1(6), of a
Pleas C.R.S misde	e note S., mak emeand	that the Colorado Statutes state tes any false material statement, or and may be punished in accordance of Printed or Typed Name Signature Signature ompliance certifications shall be submitted.	that any pers representation dance with the	son who known, or certificate provisions o	ringly, tion in f § 25-	as defined in this docume 7 122.1, C.R. Titl	in § 18- ent is g s.S.	-1-50 guilty	l(6), of a

APPENDIX D Notification Addresses

Notification Addresses

1. **Air Pollution Control Division**

Colorado Department of Public Health and Environment Air Pollution Control Division Operating Permits Unit APCD-SS-B1 4300 Cherry Creek Drive S. Denver, CO 80246-1530

ATTN: Jim King

2. United States Environmental Protection Agency

Compliance Notifications:

Office of Enforcement, Compliance and Environmental Justice Mail Code 8ENF-T U.S. Environmental Protection Agency, Region VIII 1595 Wynkoop Street Denver, CO 80202-1129

Permit Modifications, Off Permit Changes:

Office of Partnerships and Regulatory Assistance Air and Radiation Programs, 8P-AR U.S. Environmental Protection Agency, Region VIII 1595 Wynkoop Street Denver, CO 80202-1129

Operating Permit No. 96OPMO168 Issued: June 1, 2002

APPENDIX E Permit Acronyms

Permit Acronyms & Abbreviations

Listed Alphabetically:

AIRS -	Aerometric	Information	Retrieval	System

APEN - Air Pollution Emission Notice (State of Colorado)
APCD - Air Pollution Control Division (State of Colorado)

ASTM - American Society for Testing and Materials

BACT - Best Available Control Technology

Btu - British thermal unit

CAA - Clean Air Act (CAAA = Clean Air Act Amendments)

CCR - Colorado Code of Regulations CEM - Continuous Emissions Monitor

cu ft - cubic feet

CFR - Code of Federal Regulations

CO - Carbon Monoxide

CEM - Continuous Emissions Monitor COM - Continuous Opacity Monitor CRS - Colorado Revised Statute

dscf - dry cubic feet at standard conditionsEPA - Environmental Protection Agency

FO - Fuel Oil

FR - Federal Register

FSA - Fuel sampling, analysis and emission calculations plan

g - grams gal - gallon

HAPs - Hazardous Air Pollutants

HP - Horsepower

HP-Hr - Horsepower hour (g/HP-Hr = Grams per Horsepower hour)

LAER - Lowest Achievable Emission Rate

lbs - pounds M - thousand MM - million

NA - Not Applicable NG - Natural Gas NOx - nitrogen oxides

NESHAP - National Emission Standards for Hazardous Air Pollutants

NSPS - New Source Performance Standard	NSPS -	New Source Performance Standards
--	--------	----------------------------------

PM - Particulate Matter

 PM_{10} - Particulate Matter smaller than 10 microns

ppm - Parts per million

PSD - Prevention of Significant Deterioration

PTE - Potential To Emit

RACT - Reasonably Available Control Technology

RO - Residual Oil

scf - cubic feet at standard conditions

SCC - Source Classification Code
SIC - Standard Industrial Code
SpO - Specification Used Oil

SO₂ - sulfur dioxide TPY - Tons Per Year

TSP - Total Suspended Particulate VOC - Volatile Organic Compound

APPENDIX F Permit Modifications

DATE OF REVISION	SECTION NUMBER, CONDITION NUMBER	DESCRIPTION OF REVISION
October 8, 2002	Section II, Condition 6.5	Correct Table to delete reference to Condition 6.5 (there is no Condition 6.5) – Administrative Amendment
March 17, 2004	Appendix G	Revised condition 1.2.1 to account for moisture sampling method bias – Minor Modification
November 21, 2006	Section I, Condition 4.1	Add SNCR as control equipment for boiler
September 25, 2007	Section II, 8.2 & 8.4	Drift loss reduced to 0.0005% from 0.05% for cooling tower P401. Emission limits reduced accordingly to 0.55 TPY from 55.2 TPY.

APPENDIX G Coal Sampling Plan Elements

Note that in lieu of preparing, submitting and implementing a Division approved coal sampling plan, the source may use vendor receipts provided the vendor samples, prepares and analyzes coal in accordance with the requirements described in this section. The source shall retain documentation from the vendor, indicating that coal is sampled, prepared and analyzed in accordance with Division requirements.

The coal sampling plan shall, as a minimum, include details for the following:

- 1.2.1. Describe how each shipment of coal received will be sampled in accordance with ASTM D2234-99, to the extent the coal sampling is not in accordance with ASTM D2234-89, the inconsistency is acceptable only if it results in an under-calculation of SO₂ removal.
- 1.2.2. Include the provision for a proper chain of custody tracking of the sample(s);
- 1.2.3. Required samples be prepared in accordance with ASTM D2013-86;
- 1.2.4. Require the use of the following test procedures:
 - 1.2.4.1. Sulfur content shall be determined in accordance with ASTM D3177-75 or D4239-85:
 - 1.2.4.2. Heating value shall be determined in accordance with ASTM D2015-77 or D3286-85. The heat content shall be based on the high heating value of the fuel.
 - 1.2.4.3. Ash content shall be determined in accordance with ASTM D3174-93;
- 1.2.5. A copy of the test results shall be maintained and made available for Division review upon request. The range of values for the sulfur, ash, lead and heat content for the most recent calendar year shall be included in the annual certification report.
- 1.2.6. Readable, permanent copies of vendor invoices or certificates of quality reporting the coal sulfur and heat content shall be maintained with the copies of the coal sample test results and be made available for Division review upon request; and
- 1.2.7. Identify any other EPA or ASTM methods or procedures that will be utilitzed.
- 1.2.8. A chain-of-custody procedure shall be defined by the plan.

Issued: June 1, 2002

APPENDIX H Baghouse Internal Inspection Procedures